

THE MEDICINAL AND POISONOUS LABIATES OF INDIA.

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The LABIATÆ are herbs or under-shrubs with stems usually quadrangular bearing the leaves on the flat side. They form a large family of 3,300 species grouped in 200 genera. They are distributed over both hemispheres, especially in temperate regions, being particularly abundant in the Mediterranean area.

This important Order has but few poisonous members, and includes a number of medicinal and sub-medicinal plants of great value. In the lists of drugs supplied to herbalists the Labiates are very strongly represented. They mostly exhibit aromatic or bitter-aromatic, stimulant, and astringent properties; and they are used as tonics, emmenagogues, diaphoretics, and antispasmodics.

Many members yield *essential oils* when distilled. *Alkaloids*—Etonicine, stachydrine, turicine—, and *glucosides*—hyssopin—have been isolated.

The medicinal and poisonous Labiates of the world belong to 84 genera:—ACROCEPHALUS (Malay Archipelago to tropical Africa); ACROTOME (southern and tropical Africa); AEOLANTHUS (Africa); ACASTACHE (North America); AJUGA (palaeotemperate regions); AMARACUS (eastern Mediterranean); ANISOCHILUS (Asia, Africa); ANISOMELES (Indo-Malayan region); AUDIBERTIA (North America); BALLOTA (Europe, Mediterranean region; western Asia); BETONICA (cosmopolitan); BRUNELLA (cosmopolitan); CALAMINTHA (northern temperate regions; tropical mountains); COLEBROOKEA (India); COLEUS (palaeotropical regions); CUNILA (America); DRACOCEPHALUM (northern temperate regions); DYSOPHYLLA (eastern Asia, Australia); ELSHOLTZIA (Asia, Europe, Abyssinia); ENDOSTEMON (southern and tropical Africa); EREMOSTACHYS (central and western Asia); ERYTHROCHLAMYS (tropical Africa); GALEOPSIS (northern temperate regions); GENIOSPORUM (Africa, Madagascar, Indo-Malayan region); GLECHOMA (Old World); GLECHON (Brazil, Paraguay); GOMPHOSTEMMA (Indo-Malayan region, China); HEDEOMA (America); HOSLUNDIA (warm Africa); HYMENOCRATER (western Asia); HYPTIS (warm America); HYSOPIUS (Europe, Mediterranean region, Asia); IBOZA (southern and tropical Africa); LALLEMANTIA (western Asia); LAMIUM (Europe, Asia, extratropical Africa); LASIOCORYS (Africa); LAVANDULA (Mediterranean region to India); LEONOTIS (tropical and southern Africa); LEONURUS (Europe, Asia; tropical regions); LEUCAS (tropical regions; Africa, Asia); LOPHANTHUS (central Asia; China); LYCOPUS (northern temperate regions); MARRUBIUM (Europe, North Africa, temperate Asia); MARSYPIANTHES (warm America); MELISSA (Europe, western Asia); MELITTIS (Europe); MENTHA (Old World); MERIANDRA (Himalaya; Abyssinia); MICROMERIA (cosmopolitan); MONARDA (North America); MONARDELLA

(Western North America); MOSCHOSMA (palaeotropical regions); MOSLA (Himalaya to Japan); NEPETA (northern hemisphere); OCIMUM (tropical and warm temperate regions); ORIGANUM (Europe; Mediterranean region); ORTHOSIPHON (Indo-Malayan region; tropical Africa); OTOSTEGIA (western Asia; Abyssinia); PELTODON (Brazil, Paraguay); PERILLA (India to Japan); PEROWSKIA (western Asia); PHLOMIS (northern palaeotemperate regions); PHYSOSTEGIA (North America); PLATYSTOMA (tropical Asia; Africa); PLECTRANTHUS (palaeotropical regions; eastern Asia); POGOYNE (California); POGOSTEMON (Indo-Malayan region); PYCNANTHEMUM (North America); ROSMARINUS (Mediterranean region); ROYLEA (Himalaya); SALVIA (tropical and temperate regions); SATUREIA (warm regions); SCUTELLARIA (cosmopolitan, except South Africa); SOLENOSTEMON (western Africa); SPHACELE (warm America; Hawaiian Isles); STACHYS (cosmopolitan, except Australia); SYNCOLOSTEMON (southern Africa); TETRADENIA (tropical Asia; Australia); TEUCRIUM (cosmopolitan); THYMBRA (south-eastern Europe; western Asia); THYMUS (Old World); TRICHOSTEMA (North America); ZATARIA (Persia, Afghanistan); ZIZIPHORA (Mediterranean region; central Asia).

The medicinal and poisonous Labiates of India are included in the following 49 genera.—ACROCEPHALUS, AJUGA, ANISOCHILUS, ANISOMELES, BRUNELLA, CALAMINTHA, COLEBROOKEA, COLEUS, DRACOCEPHALUM, DYSOPHYLLA, ELSHOLTZIA, EREMOSTACHYS, GALEOPSIS, GENIOSPORUM, GOMPHOSTEMMA, HYMENOCRATER, HYPTIS, HYSSOPUS, LALLEMANTIA, LAMIUM, LAVANDULA, LEONOTIS, LEONURUS, LEUCAS, LYCOPUS, MARRUBIUM, MELISSA, MENTHA, MERIANDRA, MICROMERIA, MOSCHOSMA, NEPETA, OCIMUM, ORIGANUM, ORTHOSIPHON, OTOSTEGIA, PERILLA, PEROWSKIA, PLATYSTOMA, POGOSTEMON, ROYLEA, SALVIA, SATUREIA, SCUTELLARIA, STACHYS, TEUCRIUM, THYMUS, ZATARIA, ZIZIPHORA.

- I. Perfect stamens 4, rarely 2, declinate. Anther-cells confluent. Ovary 4-partite. Nutlets dry. Basal scar small.
 - A. Lower lip of corolla 1-lobed; stamens usually exerted; basal scar of nutlets not oblique.
 - i. Lower lip of corolla flat or nearly so.
 - a. Calyx deflexed in fruit, upper lobe recurved, margin decurrent on the tube.
 - i. Corolla-tube not exceeding the calyx, stigma 2-fid OCIMUM.
 - ii. Corolla-tube exceeding the calyx, stigma entire ORTHOSIPHON.
 - b. Calyx sub-erect or declinate in fruit, upper lobe not recurved, margins not decurrent.
 - i. Flowers in globose heads or in simple spikes or racemes.
 - a. Calyx narrowly tubular in fruit.
 - * Calyx suberect, upper lip 1-lobed, lower lip entire or 4-toothed ... ACROCEPHALUS.
 - ** Calyx usually declinate, upper lip 1-lobed, with the lateral and lower teeth free, or the lateral teeth united with the upper lobe ... GENIOSPORUM.
 - β. Calyx widely campanulate in fruit ... PLATYSTOMA.
 - ii. Flowers in paniculate racemes ... MOSCHOSMA.

- 2. Lower lip of corolla conspicuously concave, or boat-shaped.
 - a. Corolla distinctly 2-lipped, lower lip longer than the upper.
 - i. Upper lip of calyx rounded, deflexed; or the calyx subequally 5-toothed ... COLEUS.
 - ii. Upper lip of calyx beaked or truncate, curved downwards to close the mouth, or the calyx 1-lipped, the upper lip absent ... ANISOCHILUS.
 - b. Corolla 5-lobed, the lowest lobe shorter or equalling the other lobes ... HYPITIS.
 - B. Lower lip of corolla 3-fid; stamens included; basal scar of nutlets oblique ... LAVANDULA.
- II. Perfect stamens 4 with the upper pair longest or 2 straight diverging or ascending. Anthers 1- or 2-celled.
- A. Stamens 2; anterior perfect, anther-cells parallel ... LYCOPUS.
 - B. Stamens 4.
 - 1. Stamens subequal not didynamous.
 - a. Anthers 1-celled.
 - i. Calyx 5-toothed, teeth neither feathery nor longer than the tube.
 - α. Corolla sub-2-lipped, lower lip longer ... POGOSTEMON.
 - β. Corolla equally 4-fid ... DYSOPHYLLA.
 - ii. Calyx 5-partite, segments feathery, longer than the tube ... COLEBROOKEA.
 - b. Anthers 2-celled.
 - i. Fruiting calyx 2-lipped; corolla 5-lobed ... PERILLA.
 - ii. Fruiting calyx 5-toothed; corolla 4-lobed ... MENTHA.
 - 2. Stamens didynamous.
 - a. Anther-cells at length confluent, (2-celled when young ... ELSHOLTZIA.
 - b. Anther-cells never confluent.
 - i. Calyx 5-nerved ... ZATARIA.
 - ii. Calyx 15-nerved
 - α. Stamens exserted ... HYSSOPUS.
 - β. Stamens ascending under the hood ... HYMENOCRATER.
 - iii. Calyx 10-13-nerved
 - α. Corolla subequally 4-lobed, or obscurely 2-lipped; calyx-throat villous, mouth closed by the villi.
 - * Whirls many-flowered, capitate; bracts conspicuous forming an involucre ... ORIGANUM.
 - ** Whorls few-flowered, not capitate; bracts minute, not forming an involucre ... THYMUS.
 - β. Corolla distinctly 2-lipped, calyx-throat glabrous or hairy, mouth not closed.
 - * Corolla-tube straight.
 - ¶ Calyx sub-equally 5-toothed, or obscurely 2-lipped; corolla-tube not exceeding the calyx.
 - † Calyx usually 10-nerved (leaves linear-oblong in Indian species) ... SATUREIA.
 - †† Calyx usually 13-nerved (leaves broadly ovate in Indian species) ... MICROMERIA.
 - ¶¶ Calyx distinctly 2-lipped, corolla-tube exceeding the calyx ... CALAMINTHA.
 - ** Corolla-tube recurved and ascending ... MELISSA.

- III. Perfect stamens 2, ascending, parallel. Anther-cells linear, solitary or separated by a filiform connective.
- A. Anther-cells equal, contiguous, pendulous from a small connective PEROWSKIA.
 - B. Anther-cells equal, distant, pendulous from a long connective MERIANDRA.
 - C. Anther-cells very unequal or solitary on a long connective SALVIA.
 - D. Anthers connate at the margin ZIZIPHORA.
- IV. Perfect stamens 4 with the upper pair longest, rarely 2, ascending or diverging. Anthers 2-celled, cells at length diverging. Ovary 4-partite.
- A. Calyx tubular, 5-toothed NEPETA.
 - B. Calyx 2-lipped, upper lip much the larger ... DRACOCEPHALUM
 - C. Calyx 2-lipped, lateral lobes of upper lip on the face of the midlobe LALLEMANTIA.
- V. Perfect stamens 4, ascending, lower pair longest. Calyx 5-10-nerved. Upper lip of corolla erect, lower spreading, trifid.
- A. Calyx deeply 2-lipped; mouth of fruiting calyx closed by the lips.
 - 1. Lips of calyx entire, upper lip with a broad-plate SCUTELLARIA.
 - 2. Upper lip of calyx 3-toothed, without any plate, lower lip 2-toothed BRUNELLA.
 - B. Calyx tubular or campanulate, 5-10-toothed, or obscurely 2-lipped, mouth not closed.
 - 1. Upper lip of corolla flat, not hooded.
 - a. Stamens included in the corolla-tube. ... MARRUBIUM.
 - b. Stamens exerted from the corolla-tube ... ANISOMELES.
 - 2. Upper lip of corolla hooded.
 - a. Calyx with a very widely expanded limb, with sinuate margin OTOSTEGIA.
 - b. Calyx limb not expanded, 5-lobed, or 5-10-toothed.
 - i. Anther-cells hairy.
 - a. Anther-cells transverse; nutlets compressed GALEOPSIS.
 - β. Anther-cells not transverse; nutlets triquetrous LAMIUM.
 - ii. Anther-cells glabrous.
 - a. Calyx-teeth much shorter than the tube.
 - *Calyx 8-10-toothed.
 - ¶ Upper lip of corolla shorter than the lower LEUCAS.
 - ¶¶ Upper lip of corolla longer than the lower LEONOTIS.
 - ** Calyx 5-toothed, or lobed.
 - ¶ Upper filaments not appendiculate at the base.
 - † Anther-cells not transverse, (leaves not sected) ... STACHYS.
 - †† Anther-cells transverse, (leaves much sected) LEONURUS.
 - ¶¶ Upper filaments appendiculate at the base EREMOSTACHYS.
 - β. Calyx-teeth or -lobes as long as or longer than the tube ROYLEA.

- V. Stamens straight or ascending. Nutlets with a small basal scar or areola, rugose with a thick and slightly fleshy pericarp GOMPHOSTEMMA.
- VI. Stamens 4, ascending; calyx 10-nerved. Ovary 4-lobed. Nutlets with a large, oblique or lateral areola.
- A. Corolla 1-lipped, upper lip absent, lower 5-lobed ... TRUCRUM.
- B. Corolla 2-lipped, upper entire or 2-fid, lower 3-lobed AJUGA¹

ACROCEPHALUS.

The genus numbers 40 species, spreading from the Malay Archipelago to Africa.

A. lilacinus Oliv. is a Gold Coast remedy for headache.

Acrocephalus indicus O. Kunz. is found all over India and ascends to 5,000 ft. in the Himalayas.

The plant is used as an expectorant in Sind.

Sindi: Ustukudus—.

AJUGA.

The genus consists of 30 palaeotemperate species.

A. Iva Schreb. is used medicinally in Europe; *A. Chamaepitys* Schreb. in Europe and the M'Zab; *A. reptans* Linn. in Europe and North America; *A. ophrydis* Burch. in South Africa.

Ajuga bracteosa Wall. is a small herb inhabiting the North-West Frontier Province, Kashmir, Punjab, Kumaon, and Nepal. It extends to Afghanistan, Tibet, China, Japan, and Abyssinia.

In the Punjab the leaves are given in the treatment of fevers as a substitute for cinchona. The plant is considered a bitter astringent and an aromatic tonic, specially useful in ague.

On the Salt Range it is used to kill lice, and is regarded as depurative.

Jhelum: Kauriboti—; *Kumaon*: Ratpatha—; *Sutlej*: Karku, Nilkantihi—; *Trans-Indus*: Khurbanri—.

ANISOCHILUS.

The genus consists of 20 species, inhabiting the tropical areas of Asia and Africa.

Anisochilus carnosus Wall. is an erect annual herb found all over the country, from Western Himalaya to Burma and South India, and Ceylon.

The fresh juice of the leaves mixed with sugar-candy is given by the Tamil doctors in cynanche; and mixed with sugar and gingelly-oil, is used as a cooling liniment for the head.

¹ Dr. S. K. Mukerjee.—A Revision of the Labiatae of the Indian Empire. *Records Bot. Survey of India*; vol. xiv, no. 1; 1940.

The plant is a mild stimulant, expectorant, particularly useful in the cough of childhood. The juice of the leaves mixed with sugar and human milk is in Mysore a popular domestic remedy for coughs in children.

The juice of the leaves is commonly used in catarrh.

The plant yields a volatile oil which is credited with stimulant, diaphoretic, and expectorant properties.

Bombay: Choraonva, Kapurli—; *Canarese*: Doddapatri—; *Deccan*: Ajvan, Panjiri—; *Hindi*: Panjiri—; *Gujerati*: Ajama, Ajmamapatru, Ubhoratavelio—; *Malayalam*: Chomara, Kattukurkka, Kurkka, Patukurkka—; *Marathi*: Choraonva, Kapurli—; *Pondicherry*: Lavande—; *Sinhalese*: Galkapprawalliya—; *Tamil*: Karpuravalli—; *Telugu*: Karpuravalli, Omamu-aku, Rogachettu—.

ANISOMELES.

The genus consists of 6 Indo-Malayan species, spreading to Australia.

A. indica O. Ktze is used medicinally in Annam, the Philippine Islands, and La Reunion; *A. malabarica* R. Br. also is used in La Reunion.

Leaves broadly ovate. Nutlets black *A. indica*.
 Leaves oblong-lanceolate. Nutlets pale brown *A. malabarica*.

1. **Anisomeles indica** O. Ktze is found throughout India, ascending to 6,000 feet in the Himalayas. It is distributed to Ceylon, the Malay Peninsula and Archipelago, the Philippine Islands, and China.

The plant has carminative, astringent, and tonic properties. It yields an essential oil which, in Ceylon, is used in uterine affections.

Bombay: Gopali—; *Cantonese*: Ts'in ts'o—; *Chinese*: Ch'ien Ts'ao—; *Malaya*: Hee chin choo—; *Sinhalese*: Yak-wanassa—; *Tagalog*: Talingharap—.

2. **Anisomeles malabarica** R. Br. is found in the Deccan peninsula, and is a well-known plant in Southern India, whence it spreads to Ceylon, Malaya, and Mauritius.

In Southern India, few plants are held in higher esteem, or are more frequently employed in native practice, than this. An infusion of the aromatic bitter leaves is in common use in affections of the stomach and bowels, catarrhal affections and intermittent fevers.

In addition to its internal use in the cure of fevers, patients are made to inhale the vapour of a hot infusion so as to induce copious diaphoresis. An infusion of the leaves is given to children in colic, dyspepsia and fever arising from teething. A decoction of the plant, or the essential oil distilled from the leaves, is used externally in rheumatism.

In La Reunion the plant is considered sudorific and antipyretic. It is given for rheumatism.

In Mauritius is credited with antispasmodic and emmenagogue properties. It is given for flatulence, and in hysteria.

An infusion of the leaves of this plant is given on the west coast to children in colic, dyspepsia and fever arising from teething.

The infusion acts as a diaphoretic. An infusion (1 in 10) was tried in fever accompanying teething and was found useful (Koman).

Bombay: Chodhara—; *Canarese*: Karitumbe—; *Deccan*: Mogbirekapatta—; *English*: Malabar Catmint—; *Gujerat*: Gholochotharc, Makhmalichodharo—; *Malayalam*: Karintumpa, Pemarutti, Peruntumpa—; *Marathi*: Chodhara, Pandrachodhara, Sundara, Sundraphal—; *Mauritius*: Menthe musquée des Malabars, Boutankoushum, Pémayretti—; *Sanskrit*: Oshthaphala, Vaikuntha—; *Tamil*: Irattaipeymarutti, Peymarutti, Peyverutti, Sadumbai—; *Telugu*: Chinnaranabheri, Magabira, Mogabheri—.

BRUNELLA.

This genus includes 5 more or less cosmopolitan species.

B. vulgaris Linn. is used medicinally in Europe, China, and Malaya.

Brunella vulgaris Linn. occurs in the temperate Himalaya from Kashmir to Bhutan from 4,000 to 11,000 feet, in the Khasia Hills at 4,000-6,000 feet, and on the hills of South India: Nilgiris, Pulneys, and Travancore mountains. It inhabits most of the temperate regions of the Northern Hemisphere, and is to be found in Australia.

The herb is aromatic and carminative; reputed useful in the treatment of haemorrhages and diarrhoea. It is esteemed by herbalists for relaxed throats.

'The decoction of Prunell', says Gerarde, 'made with wine and water, doth join together and make whole and sound all wounds, both inward and outward . . .' 'There is not a better Wound herbe in the world . . .' The whole herb has astringent, styptic, and tonic properties.

Self-Heal is still in use in modern herbal treatment as a useful astringent for inward and outward use.

An infusion of the herb, made from 1 oz. to a pint of boiling water, and taken in doses of a wineglassful, is considered a general strengthener. Sweetened with honey, it is good for a sore and relaxed throat or ulcerated mouth, for both of which purposes it also makes a good gargle. For internal bleeding and for piles, the infusion is also used as an injection. It is a household remedy in Germany.

The Swiss peasants use the plant as a vulnerary.

Regarded by the Punjab Himalayan hill tribes as expectorant and antispasmodic (Stewart). The green leaves smeared with castor oil and warmed over the fire are applied externally to the anus in cases of painful piles.

The plant is used for fevers and coughs in China and Malaya, and is considered there anti-rheumatic, alterative, and tonic.

The Flambeau Ojibwe Indians of North America use the root to make a tea to drink before going hunting; it is supposed to sharpen their powers of observation. They also use the root mixed with others for a female remedy.

The whites of Wisconsin use the root as a pungent and bitter tonic and antispasmodic; they credit it with vermifuge properties,

and regard it as slightly diuretic. The root has also been used for obstructions of the liver, cramps and fits.

Arabic: Anas-ul-rawah—; *Chinese*: Hsia K'u Ts'ao—; *English*: All-heal, Brown-wort, Brunel, Brunella, Bumble-bees, Carpenter-grass, Carpenter's Herb, Fly Flowers, Heart of the Earth, Herb Carpenter, Hercules' All-heal, Hercules' Wound-wort, Hook-heal, London Bottles, Pick Pocket, Pimpernel, Prince's Feather, Proud Carpenter, Prunella, Self-heal, Sickle-wort, Slough-heal—; *French*: Bonnerette, Bonnette, Brunelle, Brunellier, Brunette, Charbonnière, Herbe au charpentier, Pâquerette, Petite consoude, Petite consyre, Prunelle—; *German*: Braunelle, Braunheil—; *Hindi*: Dharu—; *Italian*: Brunella—; *Malaya*: Lo han tsao, Look ham chow—; *North America*: Blue Curls, Carpenter Weed, Heal-all, Heart of the Earth, Self-heal—; *Ojibwe*: Basi' búgák—; *Persian*: Ustekhadus—; *Punjab*: Austakhadus—; *Roumanian*: Busuioe de camp, Busuioe marunt—; *Sind*: Ustukhudus—; *Spanish*: Brunela, Consuelda menor—; *Urdu*: Ustekhadus—; *Yorkshire*: Black Man—.

CALAMINTHA.

The genus numbers 60 species, scattered over the northern temperate regions and the mountains of the Tropics.

C. Acinos DC., *C. alpina* Lam., *C. Clinopodium* Benth., *C. grandiflora* Moench, *C. Nepeta* Savi., *C. officinalis* Moench are used medicinally in Europe.

The flowered plant of *C. officinalis* Moench is official in France.

Calamintha Clinopodium Benth. is found in the western temperate Himalaya, from Kashmir to Kumaon, at 4,000-12,000 feet. It is distributed to northern and western Asia, Europe, North Africa, and Canada.

The plant is cephalic, astringent, carminative, and tonic to the heart.

Arabic: Asaba-el-fatiyat—; *Catalan*: Alfábrega boscana—; *French*: Clinopode—; *Spanish*: Albahaca silvestre major, Angelotes, Clinopodio, Pie de cama, Perilla de cama—.

COLEBROOKEA.

A Himalayan genus, comprising only one species.

Colebrookea oppositifolia Sm. is one of the commonest and most abundant plants in the lower Himalaya. It occurs all over India, in the hilly parts, from Peshawar to Burma, and Simla to Travancore.

A preparation from the root is used by the Santals in epilepsy.

The leaves are applied to wounds and bruises.

The down on the stem and leaves is used by the Paharias of Sikkim to extract worms from bad sores on their legs.

Bombay: Bahmani, Bhamini, Dasai, Dasari, Dussarica—; *Canarese*: Tuggigidda—; *Dehra-Dun*: Binde, Bindu—; *Garhwal*: Binda, Bindu—; *Hindi*: Binda, Bindu, Pansra—; *Jaunsar*: Bambher, Lulri—; *Khond*: Darigopi, Merata—; *Kumaon*: Binda, Bindu, Dulshat—; *Matheran*: Bhaman—; *Melghat*: Chotabhandara—; *Nepal*: Dosul—; *Punjab*: Barmera, Basuti, Briali, Dashane, Duss, Phisbekkar, Sampru, Shakardana, Suali—; *Ranmagar*: Bhuriruderi—; *Saharanpur*: Binalakri, Kalabansa—; *Santali*: B̄arsakapor, Bhainsa—; *Saora*: Jolidi—; *Trans-Indus*: Shakardanta—; *Uriya*: Bosiki, Darigopi—.

COLEUS.

This genus consists of 150 palaeotropical species.

C. Amboinicus Lour. is used medicinally in Cambodia, the Malay Archipelago, and the Philippine Islands; *C. atropurpureus* Benth. in the Philippine Islands; *C. Bojeri* Benth. in Madagascar; *C. dysentericus* Baker in Nyassaland, Nigeria, and Madagascar; *C. floribundus* Baker in Ubanghi-Shari.

Coleus Amboinicus Lour., a native of the Moluccas, is cultivated in gardens throughout India, and Ceylon. It occurs wild in Rajputana.

The leaves are said to have a specific action on the bladder and to be useful in urinary diseases, vaginal discharges, etc. The juice mixed with sugar is given in cases of colic in children, and acts as a powerful aromatic carminative.

In spite of its intoxicating properties the people of Bengal employ it in colic and dyspepsia.

The expressed juice of the leaves is considered an anodyne and astringent, and applied over and around the eyelids, in cases of conjunctivitis.

In Ceylon a decoction of the leaves is given for asthma, chronic coughs, etc.

In Cochin-China the juice of the leaves is considered carminative and is given to children suffering from wind colic. The decoction is given for asthma, chronic bronchitis, epilepsy, and convulsions.

The leaves are official in Holland.

Bengal: Paterchur—; *Bombay*: Owa, Pathorchur, Pathurchur—; *Cambodia*: Chi trasak damrey—; *Hindi*: Pathorchur—; *Malay Archipelago*: Daoen Koetjing, Djinten—; *Marathi*: Panacha ova, Patharchur—; *Philippines*: Oregano—; *Sanskrit*: Pashanabhedhi—; *Sinhalese*: Kapprawalliya—; *Tagalog*: Suganda—.

DRACOCEPHALUM.

The genus consists of 40 species, inhabiting the temperate regions of the Northern Hemisphere.

Dracocephalum Moldavica Linn. is found in the western temperate Himalaya and Kashmir, at altitudes of 7,000 to 8,000 feet. It extends to northern Asia and Europe.

In Patna the seeds are used ground up in fevers, and as demulcent.

The seeds afford an opaque mucilage when soaked in water. The drug is esteemed in Persia as a carminative and tonic.

In Europe the plant is considered tonic, astringent, and vulnerary.

Arabic: Asaba-el-fatiyat, Baklat-el-utrujuya—; *Hindustani*: Tukhm-ferunj-mishk—; *Persian*: Badrendj-bouyih, Badrendj-buya, Karanfalihostani—; *Spanish*: Melisa de Moldavia, Torongil de Turquia—; *Tabriz*: Badirash-bu—; *Teheran*: Badranj-buya—.

DYSOPHYLLA.

The genus consists of 20 species, inhabiting eastern Asia and Australia,

Dysophylla auricularia Bume is found in Sikkim, eastern Bengal, Assam, Burma, Singbhum, Poona, and South India. It is distributed to Ceylon, the Malay peninsula and islands, the Philippine Islands, and China.

The herb is a Malayan remedy for colic. The leaves are powdered with lime and rubbed on the abdomen.

Malay: Ekor kuching, Poko awi tana—.

ELSHOLTZIA.

The genus consists of 30 species distributed over Asia, Europe, and Abyssinia.

Elsholtzia cristata Willd. is to be found from Kashmir to Mishmi at 1,200-9,000 feet. It has been of late introduced in the Nilgiris. It spreads to Tibet, China, Japan, northern Asia, and Europe.

In China and Cochin-China the plant is used as a medicine, a pot herb, and a condiment. In Annam the flowering tops are given as a diuretic. In Japan the leaves are used for tea. In a general way, like other Labiates, the drug is regarded by the Chinese as carminative, stomachic, and astringent.

Cantonese: Hèung ue—; *Chinese*: Hsiang Ju—; *Malaya*: Heong yee—.

EREMOSTACHYS.

The genus numbers 40 species, natives of Central and Western Asia.

Bracts and bracteoles spine-tipped, equalling calyx; bracteoles connate below in groups of 3	...	...	...	<i>E. acanthocalyx.</i>
Bracts and bracteoles not spiny, much shorter than calyx, all free	...	...	...	<i>E. Vicaryi.</i>

1. **Eremostachys acanthocalyx** Boiss. is found in West Punjab and Baluchistan, whence it extends to Baluchistan.

The Baluchis consider the plant poisonous.

Kirani: Bishkhaf—.

2. **Eremostachys Vicaryi** Benth. occurs in Western Punjab and is common on the Salt Range, ascending to 2,500 feet. It is also found at Peshawar and in Baluchistan.

In the Punjab the seeds are given as a cooling medicine.

The plant is said to be used in the Eusufzai near Peshawar for poisoning fish.

Kila Saifulla: Khurzbini—; *Pab Hills*: Bishkhaf—; *Punjab*: Gurgunna, Khalatra, Rewandchini—.

GALEOPSIS.

A genus of 7 palaeotemperate species, inhabiting the Northern Hemisphere.

G. ochroleuca Lam. is official in the Pharmacopoeia of Austria.

Galeopsis Tetrahit Linn. occurs in Sikkim and Kashmir. It is distributed over Tibet, North and West Asia, Europe; and has been introduced into North America.

The plant is well spoken of as an expectorant, and in phthical complaints. An infusion of the whole plant is used in the treatment of pulmonary troubles. It has also been employed as an anti-spasmodic resolvent, and a detergent.

English: Bastard Hemp, Bee-nettle, Blind Nettle, Dai-nettle, Day-nettle, Dea-Nettle, De-Nettles, Deye-Nettle, Dog Nettle, Donnine-thell, Female Hems, Glidewort, Hemp Nettle, Holyrope, Nettle Hemp, Stinging Nettle, Sting Nettle—; *Forest Potawatomi*: Mena' kwúskák—; *North America*: Common Hemp Nettle—.

GENIOSPORUM.

The genus includes 15 species scattered over Africa, Madagascar, and the Indo-Malayan region.

Geniosporum prostratum Benth. is found in sandy ground from the Konkan southwards, especially near the sea, and in the warmer parts of Ceylon.

In Pondicherry this plant is credited with febrifugal properties.

Pondicherry: Nazelnagai—.

GOMPHSTEMMA.

A genus of 25 Indo-Malayan species spreading to China.

Gomphostemma crinitum Wall. occurs in Assam, Burma, and the Malay Peninsula.

var. *Griffithii* Prain, which is found in Tenasserim and Malaya, is administered in the form of decoction after confinements.

Malay: Munjulong bukit—.

HYMENOCRATER.

The genus consists of 9 species, natives of Western Asia.

Hymenocrater sessilifolius Benth. occurs in Baluchistan and Afghanistan.

In Baluchistan the leaves are left overnight soaking in water, and the infusion is given as a morning drink to children.

Baluchistan: Sursánda—.

HYPTIS.

This large genus numbers 300 species, natives of warm America.

The following species are used medicinally in Madagascar and West Tropical Africa.—*H. pectinata* Poit., *H. spicigera* Lam.—; in Guiana—*H. verticillata* Jacq.—; in Brazil—*H. canescens* Benth., *H. fasciculata* Benth., *H. fruticosa* Salzm., *H. graveolens* Salzm., *H. pectinata* Poit., *H. spicata* Poit., *H. suaveolens* Poit., *H. umbrosa* Salzm.—.

Flowers not in globose heads.

Calyx 3 mm. long in fruit	...	...	...	<i>H. pectinata</i>
Calyx 8-10 mm. long in fruit	...	...	...	<i>H. suaveolens</i>

1. **Hyptis pectinata** Poit. is found in Bengal, Assam, and the Madras Presidency. It is distributed over tropical Africa and Asia.

In Ashanti and South Nigeria the plant is a medicine for young children, and used in connection with childbirth. Poultices of the leaves are applied for chest complaints.

In North Nigeria the leaf is used for fever. It is boiled for horses to inhale the vapour for diseases accompanied by mucous catarrh.

In Madagascar the plant is considered aromatic, tonic, anthelmintic, antispasmodic, emmenagogue, and odontalgic. It is mostly used to expel worms in children. A decoction or infusion of the flower heads is given in fever, and for chest troubles.

Adangme: Kadokeng—; *Angola*: Quibumbo, Quimbumba, Quimbumbo, Quinbun—; *Ashanti*: Pias—; *Awuna*: Awusa-kadi—; *Betsileo*: Afolava—; *Dagomba*: Baeba—; *Ga*: Suruwie—; *Hausa*: Kimba-kimba, Kimbar awaki, Kimbar dawaki—; *Ivora*: Rombatsahona, Sangasanganandevolahy—; *Sakalave*: Sangasanganimarina—; *Twi*: Opea, Peaba—; *Yoruba*: Jogbo—.

2. **Hyptis suaveolens** Poit. occurs in the Deccan, in Chota Nagpur, Bengal, Assam, Burma, and the Andaman and Nicobar islands. It is distributed to the Malay Archipelago, the Philippine Islands, Formosa, Indo-China, Siam, and tropical Africa.

In Orissa the plant is pounded and applied to parasitical cutaneous diseases.

In West Tropical Africa an infusion of dried leaves is taken for fever. The plant is tied round the head for headache or applied to cure boils, and the juice of the pressed leaves along with lime juice is drunk for colic and stomach-ache.

In Brazil an infusion is used as a carminative and as a sudorific in catarrhal conditions.

Colombia: Botón morado, Chavito, Mastrantillo, Mastranto de perro, Mastranto de sabana, Yerba de las muelas, Yerba de la reuma—; *Malay*: Malbar hutan, Sapulut, Selasik hutan—; *Mal Paharia*: Purudo—; *Mandingo*: Fure-jambo—; *Mexico*: Chan—; *Panama*: Purgaperro, Salvia—; *Santali*: Gangatulsi—; *Tagalog*: Pansipansiyan, Soobcabayo—; *Timne*: Bupi-bupi—; *Uriya*: Gangatulsi, Purodo—; *Venezuela*: Mastranto—; *Visayan*: Locoloco—; *Yoruba*: Jogbo—.

HYSSOPUS.

Hyssopus officinalis Linn., the sole representative of the genus, is found in the Western Himalaya, from Kashmir to Kumaon, at 8,000-11,000 feet. It spreads to Western Asia, and grows wild in middle and southern Europe.

Hyssop is classed by the Arabians amongst their anthelmintics, stimulants, and deobstruents. In Europe it has long been known as a tonic and stimulant, and was at one time in great repute as a remedy for nervous diseases. *Pliny* also thought it useful in chest affections, and *Celsus* regarded it as an anthelmintic.

Hyssop tea is a grateful drink, well adapted to improve the tone of a feeble stomach, being brewed with the green tops of the herb. The same parts of the plant are sometimes boiled in

soup to be given for asthma. To make Hyssop tea, one drachm of the dried herb should be infused in a pint of boiling water, and allowed to become cool. Then a wineglassful is to be given as a dose two or three times a day. It is of use in the ailments of women.

A distilled water of Hyssop is deemed a good pectoral medicine.

The essential oil, in doses of one to two drops, promotes expectoration in bronchial catarrh and asthma.

The green herb, bruised and applied, will heal cuts promptly. If it be steeped in boiling water and applied hot to the part, it will quickly remove the blackness consequent upon a bruise or blow, especially in the case of 'black' or blood-shot eyes. In America an infusion of the leaves is used externally for the relief of muscular rheumatism, as also for bruises and discoloured contusions.

The juice of the leaves made into a syrup with sugar and honey is used as a vermifuge for roundworms.

A decoction of the flowers of this plant from Persia was given in cases of asthma and chronic bronchitis and found to be a useful remedy in those complaints (Koman).

The flower-tops are official in France, Portugal, and Sweden; the leaves too are official in France.

Arabic: Zufah-e-Yabis, Zufah-ul-retih—; *Catalan*: Hisop—; *Danish*: Isop—; *Dutch*: Hysop—; *English*: Hyssop—; *French*: Herbe sacrée, Hysope—; *German*: Apothekerhysop, Eiserich, Gartenrispe, Hyssop, Isipo, Isop, Ispern, Issel, Josephskraut, Klosteruesopp, Luftskraut, Ysop—; *Greek*: Hysopos—; *Hebrew*: Esop—; *Hindi*: Zufah yabis—; *Italian*: Isopo, Issopo—; *Languedoc*: Mariarmo—; *Persian*: Zufah-e-khuskka, Zufah-e-tar, Zufah-e-yabis—; *Polish*: Isopek—; *Portuguese*: Hissopo—; *Roumanian*: Cimbru cel brun, Isop—; *Russian*: Issop—; *Spanish*: Hisopo—; *Swedish*: Isop—; *Urdu*: Zufah yabis—.

LALLEMANTIA.

The genus consists of 4 species, inhabiting Western Asia.

Lallemantia Royleana Benth. occurs in the North West Province, the Punjab plains and hills, and Baluchistan; extending to Afghanistan, Persia, and Turkestan.

The plant is largely grown on account of its mucilaginous seeds, which are considered cooling and sedative, and are extensively employed in the preparation of a mucilaginous beverage. In Persia they are used for cough, and as a stimulant and aphrodisiac.

In the Punjab the seeds are used as cooling and sedative remedies.

Bombay: Tukhmibalangu—; *Hamadan*: Balingan—; *Harboi Hills*: Fuchkin, Yakhtali—; *Hindi*: Ghareikashmalu, Tukhmibalangu, Tukhmlealanga—; *Kashmir*: Tukhmibalanga—; *Punjab*: Ghareikashmalu, Tukhmbalangu, Tukhmalanga, Tukmalanga—; *Persian*: Tukhmibalangu—; *Urdu*: Balanga—.

LAMIUM.

The genus includes 40 species distributed over Europe, North Africa, and temperate Asia.

Lamium album Linn. occurs in Kashmir, the Punjab, Kumaon, and Hazara. It is scattered over northern and western Asia, North Africa, and Europe.

The root is used medicinally in China. In Spain it is considered astringent and is used as a resolvent and vulnerary.

Catalan: Ortiga morta—; *Chinese*: Hsu Tuan—; *English*: Archangel, Bee Nettle, Blind Nettle, Day Nettle, Dead Nettle, Deaf Nettle, Dee Nettle, Dumb Nettle, Dummy Nettle, Dunny Nettle, Nettle, Snake Flower, Stinky Nettle, Suck-bottle, Suckie Sue, White Archangel, White Deadnettle, White Nettle—; *French*: Archangélique, Galéopsis, Lamier blanc, Lamion, Marachemin, Ortie blanche, Ortie morte, Pied de poule, Suçots blancs—; *German*: Bienenhuetel, Biemensang, Dahnnessel, Dangel, Daudelblumé, Eddernessel, Eisblume, Gageneier, Heddernessel, Honigsugel, Huebnernessel, Hundnessel, Loeffelblume, Sengenessel, Suegede, Taubnessel, Taunnessel, Urinblume, Wasserblume, Weisse Betonie, Weisser Ganzert, Weisser Kuckack, Weisse Suegete, Wurmnessel—; *Italian*: Lamio bianco—; *Russian*: Sadovui dyagil—; *Spanish*: Ortiga blanca, Ortiga muerta, Ortiga muerta blanca—.

LAVANDULA.

The genus consists of 20 species spreading from the Mediterranean to India.

L. dentata Linn., *L. Spica* DC., *L. Stoechas* Linn., *L. vera* DC. are used medicinally in Europe.

Lavandula bipinnata O. Ktze. occurs in Chota Nagpur, Mount Abu, Konkan, Jubbulpore, Khandesh, and the Deccan.

It is reported that the villagers and shepherds of the Barda Hills in Kathiawar use the plant as a medicine.

The plant is supposed to act as an antidote against snake poison. The roots are rubbed with water and the solution or the paste is applied over the sting or the bite of poisonous animals. The powdered leaves are given for inhalation to the person who has been bitten by a serpent in order to prevent him from falling into sleep.

Gujerati: Aasmanigalgoti, Sarpnocharo—.

LEONOTIS.

The genus consists of 15 tropical and South African species.

L. dysophylla Benth., *L. Leonitis* R. Br., *L. Leonurus* R. Br., *L. microphylla* Skan., *L. mollis* Benth. are used medicinally in South Africa; *L. africana* Brig. is used in Angola and Northern Nigeria; *L. nepetaefolia* R. Br. in Northern Nigeria, Madagascar, and Brazil.

Leonotis nepetaefolia R. Br. is found, either cultivated or naturalized, in the Punjab and all the hotter provinces of northern and southern India, whence it spreads to Ceylon. It is distributed to tropical Asia, Africa, and America.

In Chota Nagpur the ashes of the flower-heads are applied to burns and scalds; in Bombay they are mixed with curds and applied to ringworm and other itchy diseases of the skin.

The plant is used medicinally by the Mundas of Chota Nagpur. The whorl, in flower or in seed, is pounded and fried in Koronj

oil; this is rubbed on itch, also on head sores of small children. When a mother's breasts swell and milk does not pass through the nipples, the crushed root is rubbed on the breast (*Encyclopaedia Mundarica*).

In Loanda a decoction of the plant is used in diseases of the abdomen.

In Northern Nigeria the leaf pounded with natron is applied locally for swellings and ulcers supposed to be of syphilitic origin; the fresh leaves are applied for headache. A decoction is used to steam the head to relieve catarrh, fever, etc., and is taken also internally as a tonic and febrifuge, and for gastro-intestinal troubles. The plant is put amongst stored corn to keep away vermin.

In Madagascar the plant is considered emmenagogue, febrifuge, depurative, narcotic, bitter, and laxative; used in skin diseases, amenorrhoea, and fever.

In Porto Rico a decoction of the leaves is used as a tonic; the juice is also expressed and taken with limejuice and rum as a febrifuge.

The leaves are used in Brazil in the treatment of rheumatic affections.

Bengal: Hejurchei—; *Bombay*: Matijer, Matisul—; *Brazil*: Cordao do frade—; *Ceylon*: Kasitumpai—; *Ejik*: Ubiom—; *Fulani*: Hore gujjo—; *Gujerati*: Matijer, Matisul—; *Hausa*: Chika saura, Jam'barawo, Kam mutum, Gutar'yan sarki—; *Hindi*: Baraguma, Hejurchei—; *Krobo*: Nyeddo—; *Lagos*: Iku ekun—; *Loanda*: Maluvo, Maluvo-iamconco, Maluvo-iamgilla, Maluvo-m'angilla—; *Mano*: Seto a yi—; *Marathi*: Dipmal, Ekri—; *Mauritius*: Dacca, Léonure—; *Mundari*: Agiajanum, Gharria, Hatusengelsui, Senggelsui—; *Porto Rico*: Molonillo, Rascamoño—; *Sakalave*: Kilanjanahary—; *Santali*: Daredhomp, Janumdhomp, jonumdhomp—; *Sinhalese*: Mahayakwanassa—; *Telugu*: Beri, Hanumantabira, Mulugolimidi, Ranabheri—; *Uriya*: Kontosidho—; *Uruguay*: Uña del diablo—; *Yoruba*: Iku ekun—.

LEONURUS.

The genus consists of 8 species inhabiting Europe, Asia, and tropical regions.

L. macranthus Maxim. and *L. sibiricus* Linn. are used medicinally in China, and *L. sibiricus* is also used in Malaya; *L. Cardiaca* Linn. is used in Europe.

Upper lip of corolla densely villous, midlobe of lower lip entire	...	...	...	...	... <i>L. Cardiaca</i>
Upper lip of corolla tomentose, midlobe of lower lip orbiculate or 2-fid	...	...	...	...	... <i>L. sibiricus</i> .

1. **Leonurus Cardiaca** Linn. is found in Kumaon, Kashmir, the Punjab, Hazara, and the Kurram Valley. It is distributed to western and northern Asia, and to Europe.

Says Culpeper: 'There is no better herb to take melancholy vapours from the heart, and to strengthen it. It may be kept in a syrup or conserve; it maketh mothers joyful, and settles the womb, therefore it is called Motherwort. It is of use for the trembling of the heart, fainting and swooning. The powder, to the quantity of a spoonful, drank in wine, helps women in sore travail, as also for the suffocating or rising of the mother. It provokes

urine and women's courses, cleanses the chest of cold phlegm, kills the worms in the belly. It is of use to digest and disperse them that settle in the veins, joints, and sinews of the body, and to help cramps and convulsions.'

The herb is diaphoretic, aromatic, and stomachic.

Contact with the plant causes a dermatitis in susceptible individuals.

Catalan: Mà de Santa Maria—; *English*: Motherwort—; *French*: Agripaume, Cardiaire, Cardiale, Cardiaque, Cheneuse, Creneuse, Herbe aux tonneliers, Léonure, Patte de sorcier—; *German*: Herzgespann, Loewenschwanz—; *Italian*: Cardiacca—; *Portuguese*: Cardiacca—; *Roumanian*: Cione, Creasta cocosulin, Iarba flocoasa, Talpa gascei—; *Russian*: Pustirnik—; *Spanish*: Agripalma, Cardiacca, Cola de león—; *United States*: Lion's Ear, Lion's Tail, Motherwort, Throwwort—.

2. **Leonurus sibiricus** Linn. is found in the plains of India from Bengal and Sylhet to Coorg. It is distributed to tropical Asia, Africa, and America.

The root and leaves are bitter and used as a febrifuge.

In Chinese medicine the seeds are considered to be constructive and aphrodisiac. The dried plant is prescribed as a tonic, alterative, vulnerary, and general remedy in puerperal and menstrual diseases.

Cantonese: Ch'ung wai—; *Chinese*: Ch'ung Wei, I Mu, K'uen Ts'ao—; *Malaya*: Choong wai, Kwan chor seranting, Tebung aga—; *Patna*: Guma—; *Tagalog*: Camariangsongsong—.

LEUCAS.

The genus includes about 100 Asiatic and African species.

L. aspera Spreng. is used medicinally in the Philippine Islands; *L. decurvata* Baker in Nyasaland; *R. deflexa* Hook. fil. in Gold Coast; *L. martinicensis* R. Br. in Northern Nigeria, South Africa, and Brazil.

A. Calyx-mouth oblique.

I. Mouth of calyx much produced below ... *L. urticaefolia*.

II. Mouth of calyx produced above

Calyx-teeth very short

a. Calyx-mouth not villous within.

1. Calyx smooth below, ribbed and hispid above ... *L. aspera*.

2. Calyx smooth throughout or nearly so. Calyx-mouth very oblique ... *L. limifolia*.

b. Calyx-mouth villous within

1. Leaves linear, less than 13 mm. broad, whorls less than 2.5 cm. diam.; bracts linear, 6 mm. long ... *L. zeylanica*.

2. Leaves ovate, more than 13 mm. broad, i. Whorls 3.5 cm. diam.; bracts lanceolate, 1.5-2.5 cm. long ... *L. Cephalotes*.

ii. Whorls 2.3 cm. diam.; bracts linear-lanceolate or subulate, 6-9 mm. long ... *L. martinicensis*

B. Calyx-teeth stellately spreading in fruit, whorls terminal and axillary.

Hairs on the stem erect or spreading. Calyx 5-10 mm. long ... *L. stelligera*.

1. **Leucas aspera** Spreng. occurs more or less throughout India, in the plains. It extends to Indo-China, the Philippine Islands, Java, and Mauritius.

The leaves are said to be useful in chronic rheumatism. The juice is applied in psoriasis and other chronic skin eruptions.

In North Bengal the flowers are given warmed in a little honey for coughs and colds to children. The juice of the leaves is applied to disperse painful swellings.

In Mauritius the plant is used as an emollient and pectoral.

Caius and Mhaskar have shown experimentally that the plant is not an antidote to snake venom.

Bengal: Chotahalkusa—; *Bombay*: Tamba—; *Deccan*: Thurduribaji—; *Hindi*: Chotahalkusa—; *La Reunion*: Herbe à mouches, Herbe Tombe, Tombe—; *Mauritius*: Madame Tombé, Marrube blanc, Couma, Halkasa, Poualla toumi—; *Mundari*: Gomaara—; *Sadani*: Gumhasag—; *Tagalog*: Carucansoli, Pansipansi, Solasolasian—; *Tamil*: Tumbai—; *Telugu*: Tummachettu—; *Visayan*: Paipaisi, Pansipansi, Paypaysi—.

2. **Leucas Cephalotes** Spreng. is found throughout India from Sind to Assam, and Kashmir to Deccan; scattered over all plains districts of the Madras Presidency. It extends to Afghanistan.

The plant is considered a mild stimulant and diaphoretic, and is considerably used in fevers and coughs.

The fresh juice is used in certain localities as an external application in scabies. The flowers are administered in the form of a syrup as a domestic remedy for coughs and colds.

The seeds yield an oil, which is used medicinally in Chota Nagpur.

The leaves, in combination with other drugs, are prescribed for scorpion sting (Vagbhata); but they are not an antidote to scorpion venom (Caius and Mhaskar).

Bengal: Barahalkasa, Ghalaghase—; *Gangpur*: Nakiara, Nakingara—; *Gujerati*: Doshinokubo, Khetraukubo, Kubi, Kubo—; *Hindi*: Deldóna, Dhurpisag, Goma, Guma, Motapati—; *Khandesh*: Kedari—; *Marathi*: Devkumbha, Kumbha, Shetvad, Tumba—; *Mundari*: Bananaki, Gomanaki—; *Punjab*: Chatra, Guldoda, Maldoda, Phuman, Sisalius—; *Sanskrit*: Chatraka, Chhatrani, Chitrakshupa, Chitrapatrika, Drona, Dronapushpi, Kaundinya, Kshavapatri, Kumbhayoni, Kumbhayonika, Kurumba, Kurumbika, Palindi, Phalepushpa, Shvasanaka, Supushpi, Vrikshasaraka—; *Santali*: Andiadhuruparak, Andiadura parak—; *Telugu*: Peddatumni, Tumni—.

3. **Leucas linifolia** Spreng. is met with in the plains, more or less throughout India. It is distributed to Malaya and Mauritius.

The natives of Central India believe that the leaves, when roasted and eaten with salt, have febrifugal properties.

The fresh juice is employed as a remedy against headaches and colds.

At Lakhimpur in Assam it is used for loss of appetite. The leaves are wrapped up in a plantain leaf, heated, and then eaten. The first effect of this treatment is that the appetite decreases to such an extent that the patient is unable to take any food at all, on the second day it passes off and he takes food with avidity (Carter).

In the North West, the leaves are bruised and a teaspoonful of juice given, which is snuffed up the nostrils as a remedy against snake-bite.

The leaves are equally useless in the treatment of snake-bite whether given internally, or used as an errhine or a collyrium, or applied locally to the part bitten (Mhaskar and Caius).

Assam: Dron—; *Bengal*: Halkasa, Halkussa—; *Deccan*: Goma—; *Gond*: Gumi, Kumbha—; *Gujerati*: Jhinanpannikubo—; *Hindi*: Guma, Halkusa, Kumbha—; *Lakhimpur*: Guma—; *La Reunion*: Herbe à mouches, Herbe Tombe, Tombe—; *Marathi*: Kuva—; *Philippines*: Parnipansi—; *Sanskrit*: Dronapushpi, Kumbhi, Rudrapushpa—; *Sundriuns*: Guma, Hal-kūsa—; *Telugu*: Pulātumni—; *Urdu*: Guma—.

4. **Leucas martinicensis** R. Br. is found all over South India. It is distributed to the Malay Peninsula, tropical Africa, and tropical America.

In Gambia the whole plant is made into an infusion and used as a wash in fevers.

In Northern Nigeria the plant is burnt for the purpose of expelling mosquitoes. An infusion is used for simple gastro-intestinal troubles and for colds, and as a wash or steam for fevers.

The infusion is used in Brazil as a bath for hysterical fits and for pain in the joints.

Betsileo: Kifilanjambola—; *Brazil*: Catinga da Mulata—; *Fulani*: Erisku, Hore gujjo, Risku—; *Gambia*: Wild Tea Bush—; *Hausa*: Kam'barawo—; *Hova*: Lanjananahary—; *Katsina*: Sarakuwar sauro—; *Sokoto*: Sarakuwar sauro—; *Zaria*: 'Dai'doyar gona—.

5. **Leucas stelligera** Wall. is found in the Konkan, Canara, Mysore, and the Nilgiris.

The plant has stimulant, carminative, and emmenagogue properties.

Gujerati: Dungaraukubo—; *Laos*: Jang nog gan—; *Marathi*: Barumbi, Guma—; *Matheran*: Borambi, Guma, Matasul—.

6. **Leucas urticaefolia** R. Br. occurs from Baluchistan and the Punjab to Behar, Sind, Gujerat, Rajputana, Central and South India, mostly in the plains. It is distributed to Arabia, Nubia, and Abyssinia.

At Gomawal in Baluchistan the plant is used as a cure for fever.

Gujerat: Kubo—.

7. **Leucas zeylanica** R. Br. occurs in Assam, Chittagong, and South India, whence it spreads to Ceylon. It extends to the Malay Peninsula and Archipelago, and to China.

In Malaya the herb is used as a cure for scabies.

In Ceylon the leaves are bruised and a teaspoonful of the juice given, which is snuffed up as a remedy in snake-bite. The juice is also employed in headache and colds.

The leaves are useless as an errhine in the treatment of snake-bite (Mhaskar and Caius).

Malay: Katumbit—; *Sinhalese*: Gattatumba, Getatumba—.

LYCOPUS.

This genus includes 10 species of the northern temperate regions. *L. sinuatus* Ell. and *L. virginicus* Linn. are used medicinally in the United States of America.

Lycopus europaeus Linn. is found in Kashmir. It is distributed to Europe, West, North, and Central Asia.

The leaves are used externally as a poultice to cleanse foul wounds.

It is used in the Punjab as a cooling drug.

It has been employed in Europe as a substitute for quinine.

English: Gipsywort—; *French*: Marube aquatique—; *German*: Wolfsfuss—; *Kashmir*: Gandamgundu, Jalnim—; *Spanish*: Marrubio acuático, Pie de lobo—.

MARRUBIUM.

The genus includes 30 species, natives of Europe, North Africa, and temperate Asia.

M. Alysson Linn. is used medicinally in Spain; *M. vulgare* Linn. in Europe, California, and South Africa.

Marrubium vulgare Linn. occurs in Kashmir, the North West Frontier Province, and Baluchistan, whence it extends to Afghanistan, Europe, and North Africa.

The dried leaves and flowering tops are carminative, expectorant, laxative, aperient, diaphoretic, stimulant, and tonic.

The herb is a bitter tonic, expectorant, and diuretic. It is perhaps the most popular of herbal pectoral remedies in England. It is exceedingly valuable in coughs, cold, and pulmonary affections. In many parts it is brewed and sold as Horehound Ale, making an appetising and healthful beverage. Also a candy is prepared, and if properly made, is no doubt efficacious.

The infusion is much used in Europe as a domestic remedy for bronchitis with profuse expectoration. It is tonic, and in large doses, purgative.

The Europeans in South Africa use an infusion in febrile conditions, and especially in typhoid fever.

In America it is generally used in catarrhal states of the air passages.

The plant is especially esteemed by the Spanish-Californians as a remedy for colds and lung troubles.

In Mexico a preparation made from the leaves is used for rheumatism; it is added to mescal and applied as a liniment.

Afrikaans: Koorsbossie—; *Arabic*: Faracioun, Farasiym, Hashishatelkalb, Sufelard—; *Brahui*: Borkash—; *Catalan*: Malroig, Malrubé, Malrubi blanch, Malrubins, Marreus—; *Danish*: Hvidmarru, Hvidrubike, Rubike—; *Dutch*: Gemeene malrove—; *English*: Common Horehound, Hoarhound, Horehound, White Hoarhound—; *French*: Blanc roubi, Blanc rubi, Bonhomme, Bon riblet, Bon rubi, Grand bonhomme, Herbe vierge, Marchemin, Marinclin, Marrochemin, Marrochen, Marrube, Marrube blanc, Marrube bonhomme, Marrube commun, Mont blanc—; *German*: Andornkraut, Berghopfen, Chinakraut, Gottshuelfe, Gottverges, Gutverges, Kuckskraut, Lungenkraute, Macuseoehrchen, Marienwurzelkraut, Markobell, Nagelkraut, Siebennagelspitzer, Wasserdorn, Weisse Leuchte,

Weisser Andorn, Weisser Anton, Weisser Daurand, Weisser Dorand, Weisser Gottvergers, Weisser Winderthon, Weissleuchterkraut—; *Greek*: Prasion—; *Hindi*: Paharigandana—; *Italian*: Erba apiola, Marrobio, Marrobio bianco—; *Kurdish*: Qutainah—; *Languedoc*: Maltraste, Maribbe—; *Malta*: White Horehound, Marrobio, Robbio, Erba apiola, Marrubija, Marrubjabajda—; *Persian*: Afnesar—; *Polish*: Szanta biala—; *Portuguese*: Marroio, Marroio branco—; *Provençe*: Bouan rible, Mentastre, Marroufe, Marrubi, Moun blanc—; *Romanian*: Catusnica, Catusnica selbatica, Iarba flocoasa, Iarba mitei, Iarba vintului—; *Russian*: Marrub, Schandra—; *South Africa*: Horehound, Marvel, White Horehound—; *Spanish*: Marrubio, Marrubio blanco—; *Swedish*: Andorn—; *Urdu*: Farasiym—; *Uruguay*: Malva rubia, Marrubio, Yuyo del sapo—.

MELISSA.

A genus of 4 species, natives of Europe and Western Asia.

M. officinalis Linn. is used medicinally in Europe. Its flower-heads and leaves are official in Austria, Belgium, Brazil, Denmark, France, Germany, Hungary, Italy, Norway, Portugal, Spain, Switzerland, Turkey, and Yugoslavia.

Melissa parviflora Benth. occurs in the temperate Himalaya, from Garhwal to Sikkim and Mishmi, and in the Khasia Hills. It is distributed to Java.

The plant is a good substitute for *M. officinalis*.

Arabic: Baklatelutrujiya, Mufarehulkalab—; *Hindi*: Bililotan—; *Persian*: Badrunjboya—; *Urdu*: Baranjboya—.

MENTHA.

The genus includes 25 Old World species.

The following species are used medicinally in Europe:—*M. aquatica* Linn., *M. arvensis* Linn., *M. cardiaca* J. G. Baker, *M. gentilis* Linn., *M. piperita* Linn., *M. Pulegium* Linn., *M. rotundifolia* Huds., *M. sativa* Linn., *M. sylvestris* Linn., *M. viridis* Linn.—; in China, Indo-China, and Malaya—*M. arvensis* Linn.—; in Madagascar—*Mentha spp.*—; in South Africa—*M. aquatica* Linn., *M. capensis* Thunb., *M. crispa* Linn., *M. longifolia* Huds.—; in North America—*M. aquatica* Linn., *M. piperita* Linn., *M. sylvestris* Linn.—.

1. Leaves sessile, lanceolate to oblong, coarsely dentate, smooth above, glandular below *M. viridis*.
2. Leaves petioled, coarsely serrate, smooth above, rarely sparingly hairy on the nerves below *M. piperita*.
3. Leaves nearly sessile, sharply toothed, upper surface hoary pubescent, lower white tomentose *M. sylvestris*.
4. Leaves narrowed below, stalked, ovate, oblong, lanceolate, toothed *M. arvensis*.

1. **Mentha arvensis** Linn. is a herb of the Western Himalaya, found in Kashmir, the Punjab, Kumaon, and Garhwal. It is distributed to Afghanistan, West and North Asia, China, and Europe.

The dried plant is refrigerant, stomachic, diuretic, and stimulant. It possesses antispasmodic and emmenagogue properties. It is used in jaundice, and is frequently given to stop vomiting.

In China the leaves and stems are made into infusion, and used as carminative, sudorific, and antispasmodic.

In Annam the plant is considered an excellent diaphoretic. An infusion is given in fevers, indigestion, and cephalalgia. The juice of the leaves is applied to the sting or bite of poisonous animals. The leaves pounded with salt are applied to the whitlow.

It is said that the effect of this plant, when animals eat it, is to prevent coagulation of their milk, so that it can hardly be made to yield cheese.

Annam: Bac ha, Bac ha tay, Ke to, Kim tien bac ha, Nam ha, Thuy to, To lan—; *Arabic*: Fodanjehindi, Fotanajehindi, Habakjabuli, Habaqulhind, Naanaaehindi, Naanaaulhind—; *Bengal*: Podina—; *Bombay*: Pudinah—; *Burma*: Bhudina—; *Canarese*: Chetnimaragu, Maraga—; *Chinese*: Po Ho—; *English*: Chinese Mint, Corn Mint, Marsh Mint—; *French*: Baume des champs, Menthe des champs, Menthe du Japon, Pouliot thym—; *Guam*: Yerba buena—; *Gujerati*: Phudno, Pudina—; *Hindi*: Pudinah—; *Languedoc*: Fau pulegi—; *Malaya*: Pok ho—; *Malayalam*: Putiyina—; *Marathi*: Pudina—; *Persian*: Filfilmun, Pudinah—; *Sind*: Pfudnah—; *Sinhalese*: Odutalan—; *Spanish*: Yerba buena—; *Tamil*: Pudina, Yechakkirai—; *Telugu*: Igaenglikura, Pudina—; *Tongking*: Ba Kha—; *Urdu*: Pudinchkohi—.

2. ***Mentha piperita*** Linn. is cultivated in Indian gardens. It is found spontaneous and cultivated in most temperate regions of Europe, Asia, and North America.

The leaves and the tops of the flowering plant are carminative, stimulant, nervine, antispasmodic, analgesic, anodyne.

In Europe the herb is considered stimulant, stomachic, carminative; and is used for allaying nausea, flatulence, sickness, vomiting, and as an infants' cordial.

Its bruised fresh leaves, if applied, will relieve local pains and headache. A hot infusion, taken as tea, soothes stomach-ache, allays sickness, and stays colicky diarrhoea. This will also subdue menstrual colic.

This is one of the three plants used by the Menomini Indians of North America in the cure of pneumonia, the others being wild mint and catnep. The compound is drunk in the form of a tea and is also used as a poultice.

A volatile oil obtained from the plant is well-known in medicine for its antiseptic, stimulant, and carminative properties; and peppermint oil is the most extensively used of all the volatile oils, both medicinally and commercially.

The oil itself is often given on sugar and added to pills, also a spirit made from the oil, but the preparation in most general use is Peppermint Water, which is the oil and water distilled together. In flatulent colic, spirit of Peppermint in hot water is a good household remedy, also the oil given in doses of one or two drops on sugar.

The local anaesthetic action of Peppermint Oil is exceptionally strong. It is also powerfully antiseptic, the two properties making it valuable in the relief of toothache and in the treatment of cavities in the teeth.

Rats dislike Peppermint, a fact that is made use of by ratcatchers, who, when clearing a building of rats, will block up most of their

holes with rags soaked in oil of Peppermint, and drive them by ferrets through the remaining holes into bags.

Arabic: Nāna—; *Berber*: Nemdar, Timedja, Timersitin—; *Bogotá*: Yerba buena—; *Brazil*: Hortela pimenta—; *Catalan*: Menta piperita—; *Chinese*: Po Ho—; *Danish*: Pebermynte—; *Dutch*: Peppermint—; *English*: Brandy Mint, Peppermint—; *French*: Menthe, Menthe anglaise, Menthe d'Angleterre, Menthe officinale, Menthe poivrée—; *German*: Edelmindkraut, Edelminze, Hausminze, Odernunze, Pfefferminze, Pfeffermuenze—; *Hungarian*: Borsos menta—; *Italian*: Menta piperita—; *Menomini*: Dakixkomik—; *Mexico*: Menta piperita—; *North America*: Brandy Mint, Lamb Mint, Lamint, Peppermint—; *Norwegian*: Peppermynte—; *Polish*: Pepparmynta—; *Portuguese*: Hortelana pimentosa, Hortelao apimentada, Hortelao pimenta—; *Russian*: Myata perechnaya—; *Spanish*: Menta inglesa, Menta pimentada, Menta piperita, Yerba buena de sabor de pimenta—; *Swedish*: Pepparmynt—; *Turkish*: Nana—; *Uruguay*: Menta—; *Yugoslavia*: Paprena metvica, Nana—.

3. ***Mentha sylvestris*** Linn. is met with in the temperate Western Himalaya and Western Tibet, at altitudes of 4,000 to 12,000 feet; in Kashmir, Kumaon, Garhwal, and the Punjab. It is distributed to Afghanistan, Western and Central Asia, and temperate Europe. It is frequently cultivated in gardens in the plains of India.

The dried leaves and flower heads are carminative, and stimulant.

The leaves and a decoction of the plant are considerably used by the natives of the Himalaya as a carminative. They are also employed as an astringent, and for rheumatic pains.

The leaves soaked in water give an infusion which is drunk as a cooling medicine in Shahrig. Trans-Indus, a decoction is used in fever and heat apoplexy.

In the Konkan the plant is much used as a domestic remedy on account of its mildly stimulant and carminative properties.

The herb is used as a carminative and stimulant in Europe. The dry herb yields about 1 per cent of essential oil, endowed with the same carminative and stimulant properties.

Arabic: Fudanajhabak, Fudanajnaanna—; *Baluchi*: Purchink—; *Bombay*: Pudina, Vartalau—; *Brahui*: Purchink—; *Burma*: Boodeema—; *Catalan*: Menta borda—; *Egypt*: Habag—; *English*: Horsemint—; *French*: Mentastre, Menthe sauvage—; *Hindi*: Podina—; *Khowas*: Wealni—; *North-Western Provinces*: Padina—; *Punjab*: Baburi, Belanne, Koshu, Pudnakushna, Vien, Yura—; *Pushtu*: Shamshabai—; *Sanskrit*: Ajirnahara, Pudina, Rochani, Ruchishya, Shakashobaana, Sugandhipatra, Vantihara, Vyāñjana—; *Shahrig*: Shinshobae, Velanac, Vialangi—; *Spanish*: Mastranzo nevado, Menta silvestre—; *Urdu*: Pudina—; *Uruguay*: Menta—; *Zhob*: Shinshobae—.

4. ***Mentha viridis*** Linn. is commonly grown in native gardens all over the plains of India.

The seeds are mucilaginous. The leaves are given in fever and bronchitis, and a decoction is used as lotion in aphthae.

In Europe the herb is considered stimulant, carminative, and antispasmodic. It is added to many compounds on account of its carminative properties and its pleasant taste. For infantile troubles generally the sweetened infusion is an excellent remedy. A distilled water is made which will relieve hiccough and flatulence as well as the giddiness of indigestion.

The oil is less used than that of Peppermint.

A homoeopathic tincture prepared from the fresh plant in flower has been found serviceable in strangury, gravel, and as a local application in painful haemorrhoids. Its principal employment is for its febrifuge and diuretic properties.

Bengal: Pundia—; *Bombay*: Pahadipudina, Pudina—; *Brazil*: Hortela comum—; *Catalan*: Herba sana, Menta comuna—; *English*: Brown Mint, Fish Mint, Garden Mint, Green Mint, Lamb Mint, Mackerel Mint, Our Lady's Mint, Sage of Bethlehem, Spearmint, Spire Mint—; *French*: Baume vert, Menthe à épis, Menthe de Notre-Dame, Menthe romaine, Menthe verte—; *German*: Frauenmuenze, Gruene Muenze, Roemische Minze—; *Gujerati*: Phudino—; *Hindi*: Paharipudina, Podina—; *Italian*: Menta romana—; *Malta*: Spearmint, Menta comune, Naghnieh—; *Marathi*: Pudina—; *Mexico*: Herba buena—; *North-Western Provinces*: Paharipudina—; *Persian*: Nagbo, Pudneh, Shahsufiam—; *Pishin*: Nana—; *Portuguese*: Hortelao, Ortelao vulgare—; *Punjab*: Paharipodina, Pudina, Pudinakuhi, *Pudua*—; *Quetta*: Nana—; *Romanian*: Izma, Minta—; *Sind*: Phudina, Pudina—; *Sinhalese*: Meenchi—; *Spanish*: Costo, Erba Santa Maria, Menta romana, Yerba buena—; *Telugu*: Pudina—.

MERIANDRA.

This genus consists of 2 species, one Himalayan, and one Abyssinian.

Shrub finely tomentose or hoary. Spikes with distant clusters of flowers	...	...	...	...	<i>M. bengalensis.</i>
Shrub flocculently woolly. Spikes uninterrupted	...	...	...	...	<i>M. strobilifera.</i>

1. **Meriandra bengalensis** Benth., a native of Abyssinia, is cultivated in most of the provinces in India.

An infusion of the leaves is a useful application to aphthae and sore throats. It diminishes or arrests the secretion of milk.

Bombay: Kafurkapatta, Sesti—; *Deccan*: Kafurkapatta—; *English*: Bengal Sage—; *Hindi*: Kafurkapat—; *Tamil*: Sayayilai—; *Telugu*: Simakar-puramu—.

2. **Meriandra strobilifera** Benth. is found in the western temperate Himalaya, from Simla to Kumaon, at altitudes of 5,000 to 6,000 feet.

The decoction, when made strong, is a good lotion for ulcers and heals raw abrasions of the skin. It dries up the breast milk.

MICROMERIA.

The genus includes 130 cosmopolitan species.

M. Douglasii Benth. is used popularly as an emmenagogue along the Pacific Coast.

Micromeria capitellata Benth. occurs in Kumaon and Dehra Dun, the Upper Gangetic Plain, Chota Nagpur, Bihar, the Western Ghats, the Northern Circars, and the Nilgiris.

It is a fairly good substitute for *Mentha piperita*.

MOSCHOSMA.

The genus consists of 6 palaeotropical species.

Moschosma polystachium Benth. is found in Gujerat, Konkan, Deccan, Bengal, Bihar, and Burma. It extends to Ceylon, Java, the Philippine Islands, China, Australia, and tropical Africa.

In the Gold Coast Colony the juice of the plant is squeezed into the nostrils of children to cure headache.

Ashanti: Nwansing nwansing—; *Betsileo*: Karanjamboay, Karanjanamboay—
Hausa: Kimbar raf—; *Tamil*: Sanakki poondu—.

NEPETA.

The genus includes 150 species, natives of temperate Europe, North Africa, and Asia.

The following species are used medicinally in Europe—*N. Cataria* Linn., *N. glechoma* Benth., *N. italica* Linn.—; in China—*N. glechoma* Benth., *N. japonica* Maxim., *N. tenuifolia* Benth.—; in Annam and Malaya—*N. tenuifolia* Benth.—; in the United States of America—*N. glechoma* Benth.—.

I. Flowers in continuous spikes or heads; basal clusters rarely distinct *N. elliptica*.

II. Flowers in distinct clusters either axillary, or forming interrupted spikes or panicles.

A. Whorls all sessile.

1. Leaves as broad as long; hoary on both sides ... *N. glomerulosa*.
2. Leaves longer than broad, upper surface not hoary ... *N. ciliaris*.

B. Whorls peduncled, the lower conspicuously so.

1. Stem and branches stout; leaf-apex acute or acuminate; corolla dotted with purple ... *N. Cataria*.
2. Stem and branches slender; leaf-apex obtuse; corolla blue-purple *N. ruderalis*.

1. **Nepeta Cataria** Linn. is found in Kashmir, the North-Western Frontier Province, the Kurrum Valley, Baluchistan, and Afghanistan. It is distributed to Western Europe.

The dried leaves and flowering tops are carminative, tonic, diaphoretic, refrigerant and slightly emmenagogue, specially antispasmodic, and mildly stimulating.

Producing free perspiration, Catnep Tea is very useful in colds. It is a valuable drink in every case of fever, because of its action in inducing sleep, and producing perspiration without increasing the heat of the system. It is good in restlessness, colic, insanity, and nervousness, and is used as a mild nervine for children, one of its chief uses being, indeed, in the treatment of children's ailments.

The infusion of 1 oz. to a pint of boiling water may be taken by adults in doses of two tablespoonfuls, by children in two or three teaspoonfuls frequently, to relieve pain and flatulence. The tea may be drunk freely, but if taken in very large doses when warm,

it frequently acts as an emetic. It has proved efficacious in nervous headaches and as an emmenagogue, though for the latter purpose, it is preferable to use Catnep, not as a warm tea, but to express the juice of the green herb and take it in tablespoonful doses, three times a day.

An injection of the tea also relieves headache, hysteria, and colicky pains.

Catmint is one of the ingredients in the Menomini Indian cure for pneumonia, the others being wild mint and peppermint. The compound is drunk in the form of a tea, and is also used as a poultice on the chest.

The Flambeau Ojibwe brew a tea of catmint leaves for a blood purifier. The mint water obtained by steeping the herb in lukewarm water is used to bathe a patient, to raise the body temperature.

Catalan: Herba gatera, Menta de gat, Nepta—; *Dutch*: Kattekruid, Nip—; *English*: Catmint, Catnep, Nep—; *Flambeau Ojibwe*: Tci'name'wûck—; *French*: Cataire, Chataire, Herbe aux chats, Menthe de chat—; *German*: Katzenminze, Katzennessel, Katzensterz, Neptenkraut, Steinminze, Steinnessel—; *Italian*: Cattaiia, Cattaria, Erba gatta, Gattaria, Nepitella—; *Menomini*: Ka'saka muski'ki—; *North America*: Catmint, Catnep, Catnip—; *Roumanian*: Catusnic, Catusnica—; *Russian*: Kashachya myata—; *Spanish*: Menta gatera, Menta de gatas, Yerba gatera, Yerba de gatos—; *Swedish*: Kattmynta—.

2. **Nepeta ciliaris** Benth. is found in temperate western Himalaya, from Kashmir to Garhwal, at altitudes of 6,000 to 8,000 feet.

It is given in sherbet for fever and cough.

Punjab: Zufa yabis—; *Sind*: Jufa—.

3. **Nepeta elliptica** Royle occurs in western temperate Himalaya, from Kashmir to Kumaon, at altitudes of 5,000 to 8,000 feet.

An infusion of seeds in cold water is used in dysentery by the Punjabis.

Punjab: Tukhmmalanga—.

4. **Nepeta glomerulosa** Boiss. is found from the Punjab frontier to Baluchistan, whence it extends to Afghanistan and Persia.

It is a cure for pneumonia in Bolan, for itch in Sanjawi.

It is commonly used for indigestion.

Bolan: Simsok—; *Brahui*: Simsok—; *Chiltan*: Bhinjanbutai, Chanjanbutai—; *Quetta-Pishin*: Chinjanbutae—; *Sanjawi*: Chamjanbot—.

5. **Nepeta ruderalis** Hook. fil. occurs in the hilly parts of Bengal, Bihar, the Punjab, Kumaon, the North-West Frontier Province, Rajputana, Central India, Konkan, and Deccan. It is distributed to Afghanistan.

It is largely used in fevers, and as a cardiac tonic. The decoction is used as a gargle in sore throat.

In Nepal it is taken internally as a remedy for gonorrhoea.

Nepal: Niasbo—; *Punjab*: Badranj boya, Bebrang khatai, Billi lotan—.

OCIMUM.

The genus numbers 60 species, inhabiting the tropical and warm temperate regions of the world.

The following species are used medicinally in Europe—*O. basilicum* Linn., *O. gratissimum* Linn.—; in China and Indo-China—*O. basilicum* Linn.—; in Japan and Malaya—*O. crispum* Thunb.—; in the Philippine Islands—*O. basilicum* Linn., *O. gratissimum* Linn., *O. sanctum* Linn.—; in Guiana—*O. micranthum* Willd.—; in Brazil—*O. canum* Sims., *O. gratissimum* Linn., *O. micranthum* Willd.—; in La Reunion—*O. basilicum* Linn., *O. gratissimum* Linn.—; in Ethiopia and Abyssinia—*O. gratissimum* Linn.—; in Guinea and the Gold Coast—*O. canum* Sims., *O. basilicum* Linn., *O. viride* Willd.—; in Sierra Leone and Liberia—*O. viride* Willd.—; in Ubangi-Shari: *O. canum* Sims.—.

The flower tops of *O. basilicum* Linn. are official in France.

- A. Pedicels as long as or longer than the calyx; 2 lower calyx-teeth longer than the upper lip *O. sanctum*.
- B. Pedicels shorter than the calyx.
- I. Lower calyx-teeth longer than the upper lip.
- a. Bracts stalked *O. canum*.
- b. Bracts stalked. Fruiting calyx very shortly pedicelled *O. basilicum*.
- II. Lower calyx-teeth shorter than the upper lip ... *O. gratissimum*.

1. **Ocimum basilicum** Linn. grows throughout India. It is cultivated throughout the greater part of India, Ceylon, and Burma. It extends to the Malay Peninsula and Archipelago, Formosa, China, and Polynesia.

Diaphoretic and expectorant properties are ascribed to this plant, which is considered digestive and pectoral in La Reunion.

The roots are used for the bowel complaints of children.

The leaves are useful in the treatment of croup, for which the juice warmed with honey is given.

The expressed juice of the leaves forms the basis of a celebrated nostrum for the cure of ringworm; and the bruised leaves are applied to parts stung by scorpions to lessen the pain. The powdered dried leaves are said to be an effectual means of dislodging maggots.

The juice of the leaves or of the whole plant is dropped into the ears for the cure of headache and dullness of hearing. Mixed with ginger and black pepper it is given in the cold stage of intermittent fever.

The flowers possess stimulant, diuretic, and demulcent properties.

The seeds are largely employed, especially by the Mohammedans of Eastern Bengal, infused in water, to form a refreshing and cooling drink. When steeped in water they become immediately coated with a semi-transparent mucilage, and then form a mucilaginous jelly.

The seeds are much used medicinally in some parts of India, especially in the treatment of gonorrhoea and nephritic affections, and are regarded also as useful for dysentery and diarrhoea, especially in children for the diarrhoea of dentition. A cold infusion is said to relieve the after-pains of parturition.

The seeds washed and pounded are used in poultices for unhealthy sores and sinuses. They are also given internally with sherbet in cases of habitual constipation, internal piles, and fevers.

An infusion of the leaves is used in fevers by the natives of Gambia, where it is a popular common cooling drink.

In Guinea the decoction of the leaves and the stems is given in fevers, neuralgia, catarrh, and renal troubles; it is also used as a lotion for sore eyes.

In Annam an infusion of the plant is considered antiemetic and antidiarrhaeic. It is given for cephalalgia and gouty joints, and used as a gargle for foul breath. An infusion of the seeds is given in fevers. The seeds are chewed in cases of snake-bite, one portion is swallowed and the other portion applied to the bitten part.

The leaf is not an antidote to snake venom. In the treatment of snake-bite it is equally useless as a collyrium, an errhine, and a local application to the part bitten (Mhaskar and Caius).

Annam: Huong nhung, Nhat thong chi, Rau e lon trong, Rau e tia, Rau e trang, Rau que—; *Arabic*: Asaba-ul-feteyat, Badarwaj, Badruj, Baklut-ul-zub, Habaq, Habbok, Hebak, Hibag, Rihan, Schogor, Shahasfaram—; *Baluchi*: Nazbu—; *Bengal*: Babuitulsi, Debunsha, Khubkalam, Pashanabeddie—; *Bombay*: Takmeria—; *Brahui*: Niazpu—; *Canarese*: Kamkusturi, Ramkasturi, Sajjebiya—; *Cantonese*: Hiang Hoa Tsao—; *Catalan*: Alfabrega de fulla ampla, Alfabrega de fulla petita—; *Chinese*: Hsan Ts'ao, Lo le—; *Culi6n*: Camange—; *Deccan*: Salzat, Subjah, Subze, Tirunitru—; *Dutch*: Basilienkruid, Basilikum—; *Egypt*: Rihan, Sa'atar hendy—; *English*: Basil, Common Basil, Common Sweet Basil, Garden Basil, Roman Basil, Sweet Basil—; *French*: Basilic, Basilic des cuisinières, Basilic cultivé, Basilic aux sauces, Grand basilic, Herbe royale—; *Fulani*: Soukora—; *Gambia*: Patmagi—; *German*: Basilienkraut, Basilikum, Koenigskraut—; *Greek*: Basilikos, Okimon—; *Guam*: Atbahakat—; *Gujerat*: Damaro, Damro, Nasabo, Sabje—; *Hamadan*: Tukhm-i-raihan—; *Hausa*: Deidoya, Dodaya, Doidoya—; *Hindi*: Babuitulsi, Babul, Bahari, Barbar, Kalituli, Niyakshbo, Rihan, Sabzah, Tukhmerihan—; *Ho*: Loba—; *Iraq*: Raihan—; *Italian*: Basilico, Basillico, Ocimo, Ozzimo—; *Kathiawar*: Marvo—; *Kurdish*: Ruhan—; *Lagos*: Efrin wewe—; *Languedoc*: Embaimo—; *La Reunion*: Grand basilic—; *Las Bela*: Drar khatori—; *Malay*: Kemangi, Pokoh, Pokoh-pokoh hitam, Ruku, Ruku-ruku, Ruku-ruku hitam, Selaseh hitam, Selaseh puteh, Selasih, Selasih antan—; *Malayaian*: Pachcha, Tirunitru—; *Malinke*: Sossoguena, Soughenfira—; *Marathi*: Marya, Sabja, Sabza, Tukhamariya—; *Mauritius*: Basilic à grandes feuilles—; *Peking*: Gai K'ang—; *Persian*: Dabanshah, Firanjmushk, Nazbu, Rehan-e-dash, Reyhane sibze, Tur-eh-korasani, Ungusht-kunizuckan—; *Polish*: Bazylik—; *Porebunder*: Marvi, Takmario—; *Porto Rico*: Albahaca—; *Portuguese*: Alfabaca, Mangericoo—; *Punjab*: Babri, Baburi, Purrunj mushk, Nigand, Niyazbo, Panr, Rehan, Tulsi—; *Roumanian*: Busuioe—; *Russian*: Bazilik—; *Sanskrit*: Ajaganothika, Apetarakhsasi, Asurasa, Barba, Barbara, Barbari, Karahi, Kharapushpa, Manjariki, Munjariki, Surabhi, Surasa, Tulasidvesha, Tungi, Varvara—; *Santali*: Bharbari, Dimbubaha, Malibuha—; *Serbian*: Bosilek, Bosiliak—; *Sind*: Nazbo, Sabajbi—; *Sinhalese*: Hintala, Sawandatala, Suwandutala—; *Spanish*: Albahaca, Albabaca uina, Albahaca de hoja ancha—; *Tagalog*: Solasi, Sulasi—; *Tamil*: Tirnutpatehi, Tirunitru—; *Telugu*: Bhutulasi, Rudrajada, Vepudupachcha, Yibudipatri—; *Tongking*: Hung gioi—; *Urdu*: Janglitulasi—; *Uriya*: Dhalatulasi—; *Visayan*: Bonac, Calooy, Canela—; *Yemen*: Hehak, Raihan—.

2. **Ocimum canum** Sims is found on the plains and lower hills of India, from Assam, Bengal, Bihar, and Central India, to the south Deccan and Ceylon. It is distributed to Java, Western Asia, tropical Africa, Madagascar; and is cultivated in America.

Among the Santals, during fever when the extremities are cold, the leaves made into a paste are applied to the finger—and toenails. The same preparation is used as a cure for parasitical diseases of the skin.

In Jodhpur the seeds are drunk in milk as a tonic; and a decoction of them with potash in water is used as a cooling drink in fever. A bunch of the plant hung in the corner of a room is said to attract mosquitoes and keep the rest of the room free from them.

In Persia the mucilaginous seeds are given for lung and chest complaints.

In French Guinea the herb is especially used by women before parturition, or as an emmenagogue, the leaves cooked with groundnuts taken in small quantity.

In Ubangi Shari the decoction of the leaves is given to women after they have been delivered, as also to the newly born infant. The leaves ground in oil are applied to the temples for headache. Boiled with yam or maize flower they yield a pleasantly-flavoured soup which is eaten as a cure for cough, and bronchitis.

The plant is commonly grown in gardens in Tropical West Africa and used as 'tea leaf' for fevers, often given to children, or as a bath for febrile patients, the patient sitting and pouring it over the head, or with clothing opened out over a pot in which abundance of the plant is boiled. In Gold Coast the juice of the leaves is sometimes squeezed into the patient's eyes. At Accra a decoction is also given for dysentery, or as a mouth-wash to relieve tooth-ache.

For haemorrhage from the nose, the Sutos either inhale the smoke from burning the dried leaf or apply an ointment made with the powdered leaf.

In Madagascar the leaves and the seeds are considered aromatic, tonic, febrifuge, antiepileptic, expectorant, sternutatory, anti-rheumatismal. For malaria the seeds are ground in an infusion of the leaves. The juice and the powder obtained by pounding together the seeds and the leaves are taken as an errhine in migraine.

Adangme: Danwe—; *Awana*: Ahame, Defetsui—; *Bambara*: Chukula—; *Bengal*: Bharbari—; *Benin*: Ihiri—; *Bombay*: Ramtulasi—; *Canarese*: Nayitulasi, Ramatulasi—; *Efik*: Amana, Mfang—; *English*: American Basil, Hairy Basil, Hoary Basil, Hoary Tulsi, White Basil—; *Espiritu Santo*: Neruk—; *Ewe*: Ahame, Defetsui—; *French*: Basilic d'Amérique, Basilic commun—; *Fulani*: Katchukatchunga, Sukora, Urngol—; *Ga*: Kowe—; *Gbari*: jemijemi—; *Gbaya*: Wélé—; *Golungo Alto*: Machericao, N-xilica—; *Guam*: Atbahakat—; *Hamadan*: Tukhm-i-sherbati—; *Hausa*: 'Da'ddoya, 'Dai'doya, 'Dai'doyar masar, 'Do'dowa, 'Do'doya, 'Dwai'dwaiya, Sarakuwar sauro, 'Yar kan masallachi—; *Ho*: Loba—; *Jodhpur*: Bapji—; *Jukun*: Afyinu, Shinu—; *Kanuri*: Kabur—; *Kaolak*: Guguniece—; *Koranko*: Sogoi—; *Krobo*: Danwe—; *Lagos*: Efirin nla, Efirin oshu—; *Limba*: Fufurufuru—; *Madagascar*: Kiranjay—; *Malay*: Kemangi—; *Malayalam*: Katturamatulasi—; *Malinke*: Su-kola—; *Mandingo*: Sisejambo—; *Manja*: Sáhagna—; *Mbi*: Gouroulou—; *Moorish*: Gumuguei—; *Old Calabar*: Iyino—; *Oloke Meji*: Efirin marag-bosanyan—; *Persian*: Badrudge ibieze, Reyhane kuhî, Tukhm-chîrbati—; *Porto Rico*: Abahaca cimarrona—; *Sadani*: Garaighasi—; *Sango*: Tété—; *Sanskrit*: Ajaka, Arjaka, Gambhîra, Gandhapanîrjaka, Jambîra, Kathînjara, Kshudraparna, Kshudratulasi, Kulbera, Mukharjaka, Ugagândha—; *Santali*: Bharbhari—; *Sierra Leone*: Patnage—; *Sinhalese*: Hintalla—; *Spanish*:

Albahaca—; *Suto*: Mmavwatwane—; *Tamil*: Ganjamkorai, Kanjankorai, Naitulasi—; *Telugu*: Kukkatulasi—; *Timne*: An-soro, E-soro, Koe suru—; *Tivi*: Kungulaku—; *Togbo*: Biroulou—; *Twi*: Emeng—; *Woloff*: Ngumgume—; *Yoruba*: Aruntantan, Efinrin aja, Efinrin ata, Efinrin marugboshanyan, Efinrin wewe—.

3. **Ocimum gratissimum** Linn. is found throughout India and Ceylon, often cultivated. It is distributed to Java, tropical Africa and America.

Aromatic baths or fumigations prepared with the plant are advised in the treatment of rheumatism and paralysis. In the apthae of children a strong decoction has been found effectual.

A decoction of the leaves is of value in cases of seminal weakness, and is an esteemed remedy in gonorrhoea.

The seeds are given in headaches and neuralgia.

In China the leaves and flowers are used as a sudorific in diseases of the lungs.

Considered digestive and pectoral in La Reunion. On the Gold Coast the leaves are mashed and used as an enema by newly delirious women. It is also used for young infants.

A very popular remedy in Madagascar. It is considered aromatic, digestive, tonic, pectoral, antiemetic, antispasmodic, anti-neuralgic. The Betsileo chew the leaves for toothache, and sniff the juice of the leaves or the powdered seeds in headache.

Arabic: Furanjmishk—; *Bengal*: Ramtulshi, Ramtulsi—; *Betsileo*: Romba—; *Bombay*: Ramatulasa, Rantulsi, Tulsi—; *Chinese*: Tzeu Sou—; *Deccan*: Ramtulsi—; *English*: Large Basil, Lemon Basil, Shrubby Basil—; *Ewe*: Daiblori—; *French*: Basilic *crépu*—; *Gujerati*: Avachibavachi, Ramtulasi—; *Hindi*: Bantulsi, Malatulsi, Ramtulsi—; *La Reunion*: Baumier, Gros braume—; *Malay*: Ruku-ruku hitam, Selaseh besar—; *Malayalam*: Kattutrittavu, Ramatulasi—; *Marathi*: Ramatulasi, Ranatulasu—; *Mauritius*: Basilic, Toulashi, Toulsi—; *Mundari*: Dimbubaha—; *Persian*: Palangmishk—; *Porebunder*: Ramtulasi—; *Punjab*: Banjere—; *Sadani*: Dimbu—; *Sanskrit*: Ajaka, Doshakleshi, Nidralu, Ramatulasi, Shophahari, Sugandhi, Sukshmapatraka, Sumukha, Suprassanaka, Suvakra, Vanabarbarika, Vishaghna, Vriddhatulasi—; *Sinhalese*: Gastala, Kiritala, Ojala—; *Tamil*: Elumichantulasi, Peruntulasi, Ramtulasi—; *Tankay*: Romba—; *Telugu*: Nimmatulasi, Ramatulasi—; *Urdu*: Ramtulasi—; *Uriya*: Ramotulosi, Sondabhogohulono—; *Visayan*: Coloncogon—; *Yemen*: Hobokbok, Shajaret eszir, Vusab—.

4. **Ocimum sanctum** Linn. is found throughout India, Burma, and Ceylon, and distributed to the Malay Archipelago, Australia, the islands of the Pacific, Western Asia, and Arabia.

The root is given in decoction as a diaphoretic in malarial fevers.

The leaves have expectorant properties, and their juice is used in catarrh and bronchitis. This preparation also is applied to the skin in ring-worm and other cutaneous diseases. An infusion of the leaves is used as a stomachic in the gastric disorders of children, and in hepatic affections. The dried leaves are powdered and employed as a snuff in ozaena. They are also an effectual means of dislodging maggots. The juice dropped into the ear is said to be a good remedy for earache.

The leaves are a South Indian substitute for tea. In the Tamii country the flower-tops are ground with sesamum oil and given internally to help the expulsion of the foetus.

In Arabia the leaves are given together with pepper in tertian and quartan fevers.

The seeds are mucilaginous and demulcent, and are given in disorders of the genito-urinary system.

In Ceylon the herb is used in decoctions for cough and catarrh, sometimes chewed as a substitute for betel.

The fresh roots are ground with water and applied to the stings of wasps and bees and the bites of worms and leeches. The bruised fresh roots, stems, and leaves are applied to the bites of mosquitoes (Roberts).

Every part of the plant finds its application in the treatment of snake-bite and scorpion sting; but Caius and Mhaskar have shown experimentally that every part of it is equally useless in the antidotal and symptomatic treatment of snake-bite and scorpion sting.

The juice of the leaves or decoction of the same is considered to possess diaphoretic, antiperiodic and stimulating expectorant properties. A compound decoction of *O. sanctum*, *Tinospora cordifolia*, and *Evolvulus alsinoides* was given in cases of malarial fever with no benefit (Koman).

Arabic: Dohsch, Schadjant eszirr, Vusab—; *Badaga*: Kapputulasi—; *Bengal*: Kalatulsi, Kural, Tulshi, Tulsi—; *Bombay*: Tulas, Tulasa—; *Burma*: Lun—; *Canarese*: Kalatulasi, Karitulasi, Sritulasi, Tulasi—; *Deccan*: Tulsi—; *English*: Holy Basil, Monk's Basil, Rough Basil, Sacred Basil—; *Gujerati*: Talasi—; *Hindi*: Baranda, Kalatulsi, Krishnatulsi, Tulsi, Varanda—; *Ilocano*: Biday—; *Konkani*: Tulsi—; *Malay*: Oku, Ruku-ruku merah, Selasch hitam—; *Malayalam*: Krishnatulasi, Kunnakam, Nallatrittavu, Punya, Sivatulasi, Surasam, Trittavu, Tulasi—; *Marathi*: Tulas, Tulasichajadha—; *Pampangan*: Locoloco—; *Philippines*: Albahaca—; *Portuguese*: Mangericao—; *Punjab*: Bantulsi, Tulsi—; *Queensland*: Bulla-bulla, Mooda—; *Sanskrit*: Ajaka, Arjaka, Amrita, Apetarakshasi, Bahupatri, Bharati, Bhutaghi, Bhutaka, Bhutapatri, Brinda, Devadundubhi, Divya, Gandharini, Gauri, Gramya, Haripriya, Kathinjara, Kayastha, Krishnamula, Krishnatulasi, Kutheraka, Laxmi, Madhavi, Malashreshtha, Manjari, Papaghi, Parnasa, Patrapushpa, Pavani, Pavitra, Pretarakshasi, Punya, Sarasa, Shrikrishnavallabha, Shyama, Subhaga, Sugandha, Sulabha, Surabhi, Suradundubhi, Surasa, Suravallari, Suravalli, Sureja, Suvaha, Tivra, Tridashamanjari, Tulasi, Vaishnavi, Vishnuapati, Vishnuvallabha, Vrinda—; *Sinhalese*: Madurutala, Mudurutulla—; *Spanish*: Albahaca morada—; *Tagalog*: Balanoi, Locoloco—; *Tamil*: Alangai, Karuttulasi, Kulimittan, Kullai, Kumuli, Malgodai, Malmurugu, Mudi, Nediyan, Pirundam, Sirttulay, Surasa, Surasam, Suriyagarandai, Savadugundi, Suv, Tulasi, Tulavam, Tulay—; *Telugu*: Brynda, Gaggera, Krishnatulasi, Kukkatulasi, Nallagaggera, Nallatulasi, Tellatulasi, Tulasi—.

ORIGANUM.

The genus consists of 7 species, natives of the Mediterranean region.

O. dictamnus Linn., *O. hirtum* Link., *O. Majorana* Linn., *O. virens* Hoff. and Link, *O. vulgare* Linn. are used medicinally in Europe; *O. vulgare* Linn. is also used in China and Malaya.

1. The 2 longest stamens and sometimes all 4 projecting beyond the corolla *O. Majorana*.
2. Stamens 4 in unequal pairs slightly protruding ... *O. vulgare*.

1. **Origanum Majorana** Linn., a native of Europe, North Africa and Asia Minor, is extensively cultivated in India.

The herb is carminative and stomachic; useful in measles.

The leaves and seeds are considered astringent and a remedy for colic. The essential oil from the leaves is used for hot fomentations in acute diarrhoea.

In Europe an infusion made from the fresh plant is given to relieve nervous headaches; and externally the herb is applied in bags as a hot fomentation to painful swellings and rheumatism, as likewise for colic. The volatile oil is considered an excellent external application for sprains, bruises, etc.

Arabic: Mardakusch, Merdkouche, Mizunjush—; *Bogotá*: Mejorana—; *Bengal*: Murru—; *Catalan*: Moraduix, Moradux—; *Deccan*: Murwa—; *Dutch*: Marjolein—; *Egypt*: Bardaqush, Mardaqush—; *English*: Sweet-knotted Marjoram, Sweet Marjoram—; *French*: Marjolaine à coquille, Marjolaine des jardins, Marjolaine d'Orient, Origan marjolaine—; *German*: Badkraut, Blaudoste, Blauer Tarant, Blaudunst, Costenzkraut, Doschte, Dost, Felddoste, Frauendosten, Kostenskraut, Kunerle, Kuttelkraut, Majoran, Maraun, Margrankraut, Marieleine, Masaran, Maseran, Masoran, Meiran, Meyran, Muellerkraut, Ohrkraut, Schusterkraut, Sommermajoran, Thorant, Walldosten, Wohlgenut, Wurstkraut—; *Greek*: Amarakon, Masuran—; *Hindi*: Murwa—; *Italian*: Maggiorana, Marjorana, Persa—; *Kumaon*: Bantulsi—; *Languedoc*: Majourana, Majourena, Majurena, Mayran—; *Malta*: Sweet Marjoram, Maggiorana, Persia, Mertkux—; *North America*: Knotted Marjoram, Marjoram, Sweet Marjoram—; *Roumanian*: Maghiran—; *Russian*: Mayoran—; *Sanskrit*: Ajanmasurabhipatra, Bahuvirya, Gandhapatra, Jambira, Kharapatra, Kulasaurabha, Maricha, Maru, Marubaka, Maruta, Marutaka, Phani, Phanijjaka, Prasthakusuma, Prasthapushpa, Samirana, Shitalaka, Suravha—; *Sind*: Murwo—; *Spanish*: Almoradux, Mejorana—; *Tamil*: Marru—; *Urdu*: Marvakhusha—; *Yemen*: Mardakush—.

2. **Origanum vulgare** Linn. occurs plentifully in the Himalaya, from Kashmir to Sikkim, between altitudes of 7,000 and 12,000 feet. It is distributed to Europe, North Africa, western and northern Asia.

The herb is carminative, anodyne, stomachic, and emmenagogue. In China it is considered an excellent refrigerant.

Externally, the dried leaves and flower-tops may be applied in bags as a hot fomentation to painful swellings and rheumatism, as well as for colic. An infusion made from the fresh plant will relieve nervous headache.

The whole herb is medicinal and contains a volatile oil, which is separated by distillation. Perspiration may be produced by a warm infusion, and this is useful in the commencement of measles to bring out the eruption; it is also taken to promote the menstrual flow, when suppressed by cold; it is also valuable in spasms, colic, and to give relief from pain in dyspeptic complaints.

The oil is stimulant and rubefacient, and often used as a liniment; it is given as a stimulant and tonic in colic, diarrhoea, and hysteria. It is also applied in chronic rheumatism, tooth-ache, and ear-ache.

Arabic: Buklutulgezal, Mirzanjosh, Sutor—; *Bohemian*: Dobramyssl—; *Catalan*: Orenga—; *Chinese*: Ching Chieh, Yin Ch'en—; *Danish*: Tost, Vild merian—; *Dutch*: Orego—; *English*: Common Marjoram, Organ, Organy, Origan, Wild Marjoram—; *French*: Grande marjolaine, Grande marjolaine bâtarde, Grande marjolaine sauvage, Grand origan, Marjolaine d'Angleterre, Marjolaine bâtarde, Marjolaine sauvage, Pied de lit, Origan, Origan commun, Origan vulgaire—; *German*: Blauer Orant, Brauner Dosten, Dosten, Wilder Majoran—; *Greek*: Origanos—; *Hindi*: Mirzanjosh, Sathra—; *Italian*: Origano,

Regano—; *Malaya*: Yan chan—; *Malta*: Common Marjoram, Pot Marjoram, Regamo, Acciughero, Riegnu—; *Marathi*: Marvā, Mayarona—; *North America*: Common Marjoram, Origanum, Pot Marjoram, Wild Marjoram, Winter Marjoram, Winter-sweet—; *Norwegian*: Vild merican—; *Persian*: Mizangosch, Mirzanjosha, Oushneh—; *Polish*: Lebiotka—; *Portuguese*: Ouregao, Ouregos—; *Punjab*: Mirzanjosh—; *Russian*: Dushitsa—; *Spanish*: Oregano—; *Swedish*: Dosta—; *Telugu*: Mridumaruvamu—; *Urdu*: Mirzanjosh—.

ORTHOSIPHON.

The genus includes 50 species, natives of Indo-Malaya and tropical Africa.

Orthosiphon stamineus Benth. occurs in Assam, Burma, the Nicobar Islands, and South India. It is distributed to the Malay Archipelago, the Philippine Islands, and Australia.

In Java the leaves are made into a tea, and used in the treatment of diseases of the kidneys and bladder. They are official in Holland.

English: Cat's Whiskers, Java Tea—; *French*: Barbillere, Thé de Java—; *Malay Archipelago*: Koemis Koetjing, Remock djoeng—.

OTOSTEGIA.

The genus consists of 10 species, inhabitants of Western Asia and Abyssinia.

1. Leaves spine-tipped; calyx naked within ... *O. Aucheri*,
2. Leaves not spine-tipped; calyx bearded within ... *O. limbata*.

1. **Otostegia Aucheri** Boiss. occurs in Baluchistan, whence it spreads to southern Persia.

At Kohlu in Baluchistan the drug is administered in suppressed small-pox if the pox do not appear, after which the pox appear (Hughes-Buller).

Baluchi: Samar, Shinisg—; *Brahui*: Sadikh, Samar—; *Kohlu*: Suraghzai—.

2. **Otostegia limbata** Hook. fil. is found on the lower hills of the Punjab, west of the Jhelum to the Salt Range.

The juice of the leaves is applied to children's gums, and to ophthalmia in man and beast (Stewart).

Hazara: Chitiboi—; *Punjab*: Agzhan, Awanibuti, Bui, Jandi, Kandiari, Lana, Phutkanda—.

PERILLA.

The genus consists of 3 species, spreading from India to Japan.

Perilla ocimoides Linn. is found from Kashmir to Bhotan at altitudes of 1,000 to 10,000 feet; also in the Khasia Mountains from 3,000 to 6,000 feet; it is cultivated in Chittagong; from Champaran it extends to Burma, and is distributed to Indo-China, China, and Japan.

In China and Indo-China the leaves, the stems and the seeds are considered resolvent, diaphoretic, and cephalic. They are

prescribed in cephalalgia, hypochondriasis and mania. The leaves are eaten raw or cooked, or administered as an infusion; the seeds are either toasted or dispensed in the form of a decoction.

The plant is a popular remedy in Annam, where it is used as a sedative, an antispasmodic, and an antidote. At Vinh the herb, without the roots, is made into a decoction and taken on an empty stomach for sunstroke. At Nghe-an the decoction is used as a uterine stimulant. At Nam-o it is combined with an equal amount of *Ocimum sp.*, and used as a fumigant.

Annam: Bach to, Rau hung, Thai am mau, Tu to, Xich to—; *Chinese*: Sou Yeh—; *Hindi*: Bhanjira—; *Kumaon*: Bhangara, Jhutela—; *Naga*: Kenia—; *Vinh*: Tia to, Tu to—.

PEROWSKIA.

The genus consists of 4 species, natives of Central Asia.

1. Leaves linear-oblong, incised or pinnatisect. Calyx closed with long cottony wool *P. abrotanoides*.
2. Leaves oblong-ovate or lanceolate, crenate-serrate or incised. Calyx hispid *P. atriplicifolia*.

1. **Perowskia abrotanoides** Karel. is met with in the Western Himalaya at altitudes of 8,000 to 13,000 feet, and in Baluchistan; it is distributed to Afghanistan, Persia, and Turkestan.

At Ziarat the plant is used as a cooling medicine. The flowers are soaked in water; and this is very cooling when applied to the body of a patient suffering from fever.

Brahui: Gwari drani—; *Pushtu*: Shansshohai—; *Seistan*: Maur—.

2. **Perowskia atriplicifolia** Benth. occurs in Kashmir at 7,500-10,000 feet, and in Baluchistan, whence it spreads to Afghanistan.

In Baluchistan the plant is used as a cooling medicine.

Baluchistan: Gwaree dumoo, Gwaridrane, Tirk—; *Waziristan*: Sansobe—.

PLATYSTOMA.

The genus consists of 4 species, natives of tropical Asia and Africa.

Platystoma africanum Beauv. occurs in Bombay, Dharwar, North Kanara, and Mysore. It inhabits tropical Africa.

In Northern Nigeria it is used for fever, feverish chills or rheumatic symptoms. In Gold Coast the leaves and seeds are a remedy for children's coughs, and are also chewed with salt to cure sore throat. The juice is squeezed into the eyes to cure headache and fever. The leaves are used in Southern Nigeria as a local haemostatic.

Ashanti: Asiresidie, Saman meng—; *Benin*: Eborukhu—; *Ewe*: Sesebli—; *Hausa*: Kimbar-rafi—; *Nzima*: Siresireke—; *Twi*: Asirisiri—.

POGOSTEMON.

The genus consists of 36 Indomalayan species.

- A. Bracts ovate, imbricating, more or less concealing the calyx.
1. Stems and leaves nearly glabrous. Flowers purple ... *P. parviflorus*.
 2. Stems and leaves below hoary-puberulous. Flowers pink or white *P. plectranthoides*.
- B. Bracts narrow, lanceolate, not imbricating, not concealing the calyx.
1. Spikes more or less continuous, about 1 cm. broad ... *P. purpurascens*.
 2. Spikes much interrupted, 5-6 mm. broad *P. Heyneanus*.

1. **Pogostemon Heyneanus** Benth. (= *P. Patchouli* Hook. fil.) occurs in Kanara, the Western Ghats, and the Nilgiris. It extends to Ceylon, and is distributed to Java and the Philippine Islands.

The plant is diuretic, carminative, and insecticide. It yields an essential oil largely employed in perfumery.

Bengal: Pachapat—; *Bombay*: Patchpan—; *Dutch*: Patchoeli—; *English*: Patchouli—; *French*: Patchouli—; *Gujerati*: Patchpanadi—; *Hindi*: Pacholi, Peholi—; *Malaya*: Bur kalif, Poko nilam—; *Marathi*: Mañi, Patcha, Patchpan—; *Sind*: Panel—; *Sinhalese*: Gang-kolang-kola—; *Spanish*: Pachuli—; *Straits Settlements*: Tilam wangi—; *Visayan*: Cablan—.

2. **Pogostemon parviflorus** Benth. occurs more or less throughout India.

The fresh leaves, bruised, are applied as a cataplasm in order to clean wounds and promote healthy granulation. In Satara the juice is given in colic and fever.

The root is a reputed remedy for hæmorrhage, and has been given successfully in uterine hæmorrhage.

The roots are used in the Ratnagiri District as an antidote for the poison of *Echis carinata*, a common snake in that district. The plant, in combination with other drugs, is prescribed as an antidote to snake and scorpion venoms; but Caius and Mhaskar have shown experimentally that no part of the plant is an antidote to either snake or scorpion venom.

Bombay: Pangla, Phang, Phangla—; *Konkani*: Pangla—; *Marathi*: Pangli—; *Matheran*: Pangli—.

3. **Pogostemon plectranthoides** Desf. is found in the Western Himalaya, Lower Bengal and Upper Burma, Bihar, Gujerat, Konkan, and South India.

The properties are said to be the same as those of *P. parviflorus*.

Bengal: Jin—; *Deccan*: Pangla—; *Garhwal*: Lujra—; *Khond*: Ishwarjata—; *Konkani*: Pangla—; *Haldwani*: Kalabasinga—; *Ramnagar*: Rudera—; *Telugu*: Kusurijang—; *Uriya*: Dumobadotoko, Gondripulu, Poksunga—.

4. **Pogostemon purpurascens** Dalz. is found in South India, Manipur, and Burma.

It is used as a substitute for *P. parviflorus*.

ROYLEA.

Roylea elegans Wall., the only species, is found in the sub-tropical Western Himalaya from Kashmir to Kumaon, at altitudes between 2,000 and 5,000 feet.

An infusion of the leaves is drunk for contusions produced by blows, and about Kumaon the same preparation is used as a bitter tonic and febrifuge.

Garhwal: Karui, Titpati—; Hindi: Patkarru—; Jaunsar: Karanoi—; Kumaon: Kauri, Titpatti—; Punjab: Kaur, Kauri—.

SALVIA.

The genus numbers 550 species, inhabiting the tropical and temperate regions of the world.

The following species are used medicinally in Europe—*S. aethiops* Linn., *S. canariensis* Linn., *S. glutinosa* Linn., *S. Grahami* Benth., *S. hispanica* Linn., *S. Horminum* Linn., *S. officinalis* Linn., *S. pratensis* Linn., *S. Sclarea* Linn., *S. triloba* Linn. fil., *S. Verbenaca* Linn., *S. verticillata* Linn., *S. viridis* Linn.—; in China—*S. japonica* Thunb., *S. miltiorhiza* Bunge., *S. plebeja* R. Br.—; in Malaya—*S. miltiorhiza* Bunge—; in North America—*S. lanceolata* Bruce, *S. officinalis* Linn., *S. Verbenaca* Linn.—; Mexico—*S. polystachya* Ort., *S. hispanica* Linn.—; in Colombo—*S. palaefolia* H. B. K.—; in Madagascar—*S. leucodermis* Bak.—; in La Reunion—*S. gerardiana* Benth.—; in Mauritius—*S. coccinea* Juss.—; in South Africa—*S. africana* Linn., *S. aurea* Linn., *S. coccinea* Juss., *S. paniculata* Linn., *S. repens* Burch., *S. rugosa* Thunb., *S. runcinata* Linn. fil., *S. scabra* Thunb., *S. sisymbriifolia* Skan., *S. stenophylla* Burch., *S. triangularis*. Thunb.—.

I. Small shrubs or undershrubs; leaf-blade usually .5-2 cm. long

- | | | | | |
|---------------------------|-----|-----|-----|------------------------|
| 1. Corolla 15-25 mm. long | ... | ... | ... | <i>S. cabulica</i> . |
| 2. Corolla 5 mm. long | ... | ... | ... | <i>S. aegyptiaca</i> . |

II. Herbs; leaf-blades usually much exceeding 2 cm.

A. Leaves more or less thick, rugose or rugulose; calyx teeth more or less spinous.

- | | | |
|--|-----|-------------------------------|
| 1. All leaves more or less sessile, oblanceolate | ... | <i>S. lanata</i> . |
| 2. All or lower leaves petiolate, ovate to oblong. | | |
| a. Calyx 20-25 mm. long, in fruit. | | |
| i. Leaves subentire or serrate; bracts usually whitish | ... | ... <i>S. macrosiphon</i> . |
| ii. Leaves coarsely dentate or lobed; bracts usually green | ... | ... <i>S. spinosa</i> . |
| b. Calyx 10-15 mm. in fruit. Perennial | ... | ... <i>S. Moorcroftiana</i> . |

B. Leaves membranous, neither rugose nor rugulose; calyx teeth not spinous.

- | | | |
|---|-----|---------------------------|
| 1. Corolla 5 mm. long, white or lilac. Annual | ... | <i>S. plebeja</i> . |
| 2. Corolla 25-30 mm. long, yellow | ... | ... <i>S. glutinosa</i> . |

1. **Salvia aegyptiaca** Linn. occurs in the Punjab plains, Sind, and Baluchistan, whence it spreads westwards to Afghanistan. It is distributed to Persia and North Africa.

At Pab, in Jhalawan, the plant is used as a cure for eye diseases.

In Sind the seeds are used as demulcent in diarrhoea, gonorrhoea, and haemorrhoids.

Arabic: Ra 'al, Raale, Sadjaret el ghasal, Shajaret-el-ghazal—; *Baluchi*: Kohi maur—; *Bolan*: Chamimar, Chammamaor—; *Egypt*: Ra 'al, Shegeret-el-ghazal—; *Pab*: Maur—; *Punjab*: Tukhmmalanga—; *Tank*: Paska, Rangboti—.

2. **Salvia cabulica** Benth. extends from the Punjab frontier to Baluchistan and Afghanistan.

In Baluchistan the plant is considered a cure for fever, also for colds and lung diseases.

Baluchistan: Mateto—.

3. **Salvia glutinosa** Linn. occurs in the North-West Frontier Province, Kashmir, the Punjab, Kumaon, Gharwal, Sikkim, and Bhootan. It is distributed to Tibet, Western Asia, and Europe.

In some parts of Europe an infusion of the leaves and flower tops is used as a diaphoretic, stimulant, and stomachic. It is an excellent lotion for ulcers, and to heal raw abrasions of the skin.

Spanish: Cetro de Júpiter—.

4. **Salvia lanata** Roxb. is found in the Western Himalaya, from Murree to Kumaon, at altitudes of 5,000 to 8,000 feet.

'It is a good substitute for *S. Moorcroftiana*.

5. **Salvia macrosiphon** Boiss. extends from the Punjab frontier to Baluchistan, Afghanistan and Persia.

At Pre Ghal, in Waziristan, the plant is used as a poultice for gangrene.

6. **Salvia Moorcroftiana** Wall. is found in the Western Himalaya, from Kashmir to Kumaon, at altitudes of 6,000 to 9,000 feet.

The root is given in cough, and the seeds are used as an emetic. The leaves are a medicine for guinea-worm and itch, and in the form of poultice applied to wounds. At Lahore, the seeds are given in colic and dysentery, and are applied to boils. The seeds are given for haemorrhoids.

Punjab: Gurgumma, Halu, Kallijarri, Laphra, Papra, Shobri, Thut—.

7. **Salvia plebeia** R. Br. is found throughout India. It is distributed to China, the Malay Islands and Australia.

The seeds are used as demulcent in gonorrhoea, menorrhagia, diarrhoea, and haemorrhoids.

The herb is used as a diuretic, astringent, and anthelmintic in China.

Bengal: Bhutulsi, Khokaburadi—; *Bombay*: Kammarkas—; *Chinese*: Ching Chieh, Ho Shih—; *Punjab*: Samundarsok, Sathi—; *Sind*: Kiuro, Summundursok—.

8. **Salvia spinosa** Linn. occurs in Baluchistan, and is distributed to Mesopotamia, Syria, and Arabia.

At Burj, in Toba Achakzai, the seed is powdered and applied to the teeth to cure tooth-ache.

Egypt: Na'eyme, Shadjeret-el-gemal, Ta'elbe, Tha'alaba—; *Mosul*: Hamham—; *Pushtu*: Ganacha—; *Quetta-Pishin*: Ganacha—.

SATUREIA.

The genus numbers 130 species dispersed through the warm regions of the world.

S. hortensis Linn., *S. montana* Linn., and *S. Thymbra* Linn. are used medicinally in Europe.

Satureia hortensis Linn. occurs in Kashmir. It is distributed to Afghanistan, Western Asia, Europe, America, and South Africa.

The herb is aromatic and carminative. The leaves and flower-tops are used as a stimulant.

Catalan: Sajulida, Sajurida—; *Dutch*: Boonenkruid—; *English*: Summer Savory—; *French*: Herbe de Saint Julien, Sadrée, Sarriète, Sarriette, Sarriette des jardins, Sauriette, Savorée, Savourée—; *German*: Bohnenkraut—; *Italian*: Santoreggia, Satureja—; *Portuguese*: Segurelha—; *Roumanian*: Galbinare—; *Russian*: Chaber—; *Spanish*: Ajedrea, Tomillo real—.

SCUTELLARIA.

The genus includes 200 cosmopolitan species.

S. canescens Nutt., *S. cordifolia* Muehl., *S. galericulata* Linn., *S. integrifolia* Linn., *S. lateriflora* have, at some time or other, been used medicinally and also as a source of 'scutellarin'—; *S. baicalensis* Georg. is used in China.

Scutellaria galericulata Linn. is found in Kashmir. It inhabits Central and Northern Asia, Europe, North Africa, and North America.

If a decoction of the plant is made with 2 ounces of the herb to 8 ounces of water, and is taken for some weeks continuously in recent epilepsy, or when the disease has only functional causes, it will often prove very beneficial. Likewise, this decoction, in common with an extract of the herb, has been given curatively for intermittent fever and ague, as well as for some depressed and disordered states of the nervous system.

A homoeopathic tincture has been successfully given in cases of the epileptiform 'petit mal'.

The crushed plant is applied fresh to old ulcers.

The Flambeau Ojibwe, of North America, use the plant for medicine having something to do with heart trouble.

Dutch: Gliëkruid—; *English*: Blue Scullcap, Greater Scullcap, Helmet Flower, Hooded Willow Herb, Hoodwort—; *Flambeau Ojibwe*: Tcatcabonú 'ksik—; *French*: Grande toque, Scutellaire en toque, Toque—; *German*: Helmkraut, Stumpfhelmkraut—; *North America*: Hooded Scullcap, Marsh Skulcap—; *Spanish*: Escutellaria—.

STACHYS.

The genus consists of 200 cosmopolitan species, absent from Australia.

The following species are used medicinally in Europe—*S. annua* Linn., *S. arvensis* Linn., *S. Betonica* Linn., *S. germanica* Linn., *S. hirta* Linn., *S. maritima* Linn., *S. palustris* Linn., *S. recta* Linn., *S. sylvatica* Linn.—; in China—*S. aspera* Michx., *S. Sieboldi* Miq.—; in Colombia—*S. bogotensis* H. B. K.—.

- I. Stems and leaves beneath densely white woolly ... *S. parviflora*.
- II. Stems and leaves densely or sparingly hairy, but not woolly.
1. Leaves petioled; corolla-tube exerted.
 - a. Petiole 2 cm. or shorter, margin crenate ... *S. Sieboldi*.
 - b. Petiole 4 cm. or longer, margin serrate ... *S. sylvatica*.
 2. Leaves sessile; corolla-tube included ... *S. palustris*.

1. **Stachys palustris** Linn. grows in Kashmir. It is found in Northern and Western Asia, Europe, and North America.

The plant has always had in Europe a great reputation as a vulnerary.

In modern herbal medicine the herb, collected when just coming into flower and dried, is employed for its antiseptic and antispasmodic properties. It relieves gout, cramp and pains in the joints, and vertigo. The bruised leaves when applied to a wound will stop bleeding and heal the wound. The fresh juice is made into a syrup and taken internally to stop haemorrhages, diarrhoea, and dysentery.

In North America the plant is used as a vulnerary, antispasmodic, emetic, and emmenagogue.

English: All-Heal, Clown's Woundwort, Downy Woundwort, Husbandman's Woundwort, March Woundwort, Marsh Woundwort, Opopanewort, Panaij—; *French*: Crapaudine, Epiaire des marais, Ortie morte, Ortie rouge, Stachys des marais—; *North America*: Clown's All-heal, Clown's Woundwort, Dead-nettle, Hedge-nettle, Marsh Woundwort, Rough-weed—.

2. **Stachys parviflora** Benth. is found in the Punjab plains and hills; it extends to Afghanistan.

In the Salt Range the bruised stems are applied to the guinea-worm.

Punjab: Baggibuti, Kirimar—; *Pushtu*: Speraghunai—.

3. **Stachys Sieboldi** Mig. occurs in Upper Burma; it extends to China.

The plant is used medicinally in China as a febrifuge, astringent, and vulnerary.

Chinese: Ts'ao Shih Ts'an—.

4. **Stachys sylvatica** Linn. is found in Kashmir; it extends to Northern Asia and Europe.

An old authority has it that this herb 'stamped with vinegar and applied in manner of a pultis, taketh away wens and hard

swellings, and inflammation of the kernels under the eares and jawes', and also that the distilled water of the flowers 'is used to make the heart merry, to make a good colour in the face, and to make the vital spirits more fresh and lively'.

The plant is credited in France with tonic, emmenagogue, and diuretic properties.

English: Hedge Woundwort—; *French*: Epiaire des bois, Ortie à crapaud, Ortie morte des bois, Ortie puante, Stachys des bois—.

TEUCRIUM.

The genus includes 100 cosmopolitan species.

The following species are used medicinally in Europe—*T. Botrys* Linn., *T. Chamaedrys* Linn., *T. fruticans* Linn., *T. majorana* Pers., *T. marum* Linn., *T. montanum* Linn., *T. Polium* Linn., *T. pyrenaicum* Linn., *T. scordium* Linn., *T. scorodonia* Linn.—; in South Africa—*T. capense* Thunb., *T. riparium* Hochst.—.

1. Leaves small, subsessile, ovate or obovate, cuneate-attenuated, obtuse *T. Stocksianum*.
2. Leaves small, sessile, oblong, obtuse *T. scordium*.

1. **Teucrium scordium** Linn. is found in Kashmir; it extends to Afghanistan, Northern and Western Asia, Europe, and North Africa.

The herb is considered in Europe antiseptic, diaphoretic, and stimulant. An infusion gives excellent results in all inflammatory diseases.

In Spain the flower tops and the leaves are considered aromatic, bitter, astrigent, and are mostly used as diaphoretics and vermifuges.

Arabic: Skordeon—; *Bohemian*: Wodnj czessner—; *Catalan*: Escordio—; *Danish*: Skordium—; *Dutch*: Waterloo—; *English*: Water Germander—; *French*: Germandrée aquatique, Germandrée d'eau, Scordium—; *German*: Batengel, Knoblauch gamander, Lachenknoblauch, Lachinsknoepfloch, Laeusekraut, Moosknoblauch, Peterskraut, Rosslauch, Schlagkraut, Schorseken, Scordienkraut, Sonnenschit, Wasserbathengel, Wasserknoblauch—; *Greek*: Scordion, Scordochorto—; *Hungarian*: Vizi foghadyma—; *Italian*: Scordio—; *Lithuanian*: Embutti—; *Polish*: Czosnkowc ziele—; *Portuguese*: Escordio—; *Russian*: Dikiy tchesnok, Scordiya, Zayatchiy tchesnok—; *Spanish*: Escordio, Escordio oficial—.

2. **Teucrium Stocksianum** Boiss. occurs in the Western Punjab, the North-Western Frontier Province, Baluchistan, and Afghanistan.

In the Harboi Hills the herb is given in cases of pain at the heart. At Kirani, near Quetta, it is used as a cure for fever.

In Persian Baluchistan the plant is boiled and allowed to stand all night; the water is then drunk as a remedy for colds.

Baluchistan: Kalpora, Kalporag—; *Waziristan*: Kastorai—.

THYMUS.

The genus consists of 33 species, inhabiting the temperate regions of the world.

T. mastichina Linn., *T. serpyllum* Linn., and *T. vulgaris* are used medicinally in Europe.

Thymus serpyllum Linn. is found in the Western temperate Himalaya, from Kashmir to Kumaon, at altitudes between 5,000 and 13,000 feet. It is distributed to Northern and Western Asia, Europe, and North Africa.

In the Punjab the herb is given in weak vision, complaints of the stomach and the liver, suppression of urine and menstruation (Honigberger). On the Chenab the seeds are given as a vermifuge (Stewart).

The oil is sometimes applied as a remedy in toothache.

In Europe the herb is considered antispasmodic, carminative, and tonic. An infusion is given in convulsive coughs, whooping coughs, catarrh, and sore throat; it is good for nervous or hysterical headaches, for flatulence, and the headache which follows inebriation. The infusion is also profitably applied for healing skin eruptions of various characters.

In Persia the leaves are considered carminative. In Teheran they are given for 'too much water in the stomach'.

Arabic: Saatar—; *Catalan*: Farigola de montanya, Serpoll—; *Danish*: Vildtimian—; *Dutch*: Quendel, Wilde Thym—; *English*: Bank Thyme, Brotherwort, Creeping Thyme, Hill-wort, Horse Thyme, Mother of Thyme, Pella Mountain, Penny Mountain, Piliol, Puliali Mountain, Running Thyme, Serpell, Shepherd's Wild Thyme, Wild English Thyme, Wild Thyme—; *French*: Mignotise des Gênois, Pillolet, Piolet, Poleur, Pote, Pouilleux, Pouliet, Pouliot bâtard, Serpolet, Serpoule, Thym bâtard, Thym rouge, Thym sauvage, Thym serpolet—; *German*: Ameisenkraut, Bienenkraut, Choelm, Citronenquendel, Demutkraut, Fallboll, Feldkoehm, Feldkuemmel, Feldquendel, Feldthymian, Gundelkraut, Gundling, Gunnerle, Heidequendel, Heublume, Huehnerklee, Huehnerkull, Immenkraut, Jungfernzucht, Kandelkraut, Karwendel, Kindelkraut, Kingle, Koschmes, Kostenskraut, Kudelkraut, Kuechenpolei, Kueckenkuemmel, Kuenlein, Kulkraut, Kundelkraut, Kunerle, Kutelkraut Magaro, Marienbettstroh, Mattenkolen, Neugelenk, Quandel, Quangelchen, Quendel, Quengel, Raenderpolei, Rainkuemmel, Rainpolei, Schmergel, Simio, Steinquendel, Thymchen, Thyrmann, Tuemchen, Unsererlieben-frauenbettstroh, Zymis—; *Greek*: Erpylos—; *Hindi*: Banajwain—; *Italian*: Pepolino, Sermollino, Serpillo, Serpolino, Serpollo—; *Languedoc*: Faligouleto, Ferigouleto—; *North-Western Provinces*: Banajwain—; *Persia*: Djusha, Seetere, Zatar—; *Polish*: Mauerzanka—; *Portuguese*: Serpao, Serpil, Serpilhi, Serpol—; *Punjab*: Kalandarzatar, Marizha, Masho, Rangsbur, Shakei—; *Roumanian*: Cimbru de camp, Cimbrusor, Serpun, Serpunel—; *Russian*: Bogorodskaya trava, Chaber, Chabietz—; *Spanish*: Serpol—; *Swedish*: Backtimjan, Bracktimian—; *Teheran*: Joſhan shirazi—; *Turkish*: Sateriberri—; *Urdu*: Hasha—; *Yemen*: Saatar—.

ZATARIA.

Zataria multiflora Boiss. is found in Baluchistan, whence it spreads to Afghanistan and Persia.

In Jhalawan the plant is used as a cure for stomach-ache.

Baluchistan: Isghand, Izgun—; *Hamadan*: Zatar—; *Jhalawan*: Izghand—; *Urdu*: Saatar—.

ZIZIPHORA.

The genus includes 12 species, natives of the Mediterranean region and Central Asia.

1. Much-branched, at the base more or less suffruticose ... *Z. clinopodioides*.
2. An annual herb *Z. tenuior*.

1. **Ziziphora clinopodioides** M. Bieb. is found in Baluchistan. It is distributed to Afghanistan, Persia, the Caucasus, Armenia, and Syria.

At Jelga in Baluchistan the whole of the plant is dried and kept, and a decoction is used to cure typhus fever; also leaves are soaked in water at night and the infusion is drunk in the morning in cases of heat. In the Harboi Hills the juice is used as a tonic after recovery from fever.

Baluchi: Purchink—; *Harboi Hills*: Purchink—; *Persian*: Pudina—; *Pushtu*: Maurai—; *Ziarat Hills*: Maurai—.

2. **Ziziphora tenuior** Linn. occurs in the North-West Frontier Province, and Baluchistan. It is distributed to Afghanistan, Persia, Asia Minor, Turkestan, Soongaria, and Siberia.

The herb is used in Baluchistan to allay fever. In Teheran it is employed as a cordial and stomachic.

The seeds powdered and mixed with butter milk are used to cure dysentery in Kila Abdulla. They are used as a cure for fevers in Kharan.

Arabic: Mishkatar-el-mashih—; *Hindubagh*: Maurai—; *Iraq*: Za 'tar—; *Kalat*: Mashnapurchink—; *Kharan*: Kohipurchink—; *Kharwas*: Tukhammelanga, Tukhumimalayan—; *Kila Abdulla*: Kahkuti, Tukhammalangai—; *Kurdish*: Jata, Pung—; *Quetta-Pishin*: Kahkuti—; *Shiriz*: Rang—; *Tank*: Paparboti—; *Teheran*: Kakuti—.